

SUMMARIES									
Result No.	Score	Query	Match	Length	DB ID	Description	\$		
1	3501.5	77.0	870	12	US-10-424-599-273691	Sequence 273691;			
2	3387.5	74.5	878	14	US-10-254-534-2	Sequence 2, Appli			
3	3356	73.8	882	14	US-10-056-454A-15	Sequence 15, Appli			
4	3315	72.9	841	16	US-10-437-963-154157	Sequence 154157,			
5	3261.5	71.8	814	14	US-10-171-008-10	Sequence 10, Appli			
6	3176	69.9	825	16	US-10-437-963-114379	Sequence 114379,			
7	3176	69.7	855	9	US-09-792-127-4	Sequence 4, Appli			
8	3166.5	69.7	798	12	US-10-336-553-70	Sequence 70, Appli			
9	3166.5	69.7	870	12	US-10-336-553-54	Sequence 54, Appli			
10	3152.5	69.4	829	9	US-09-792-127-5	Sequence 5, Appli			
11	3148	69.3	695	9	US-09-792-127-2	Sequence 2, Appli			
12	2204	48.5	464	14	US-10-254-534-4	Sequence 4, Appli			
13	2124	46.7	776	12	US-10-336-753-56	Sequence 56, Appli			
14	2124	46.7	822	14	US-10-171-008-9	Sequence 9, Appli			
15	2119	46.6	827	16	US-10-437-963-170346	Sequence 170346,			

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

RESULT 1  
US-10-424-599-273691;  
Sequence 273691, Application US/10424599;  
Publication No. US2004001072A1  
GENERAL INFORMATION:  
; APPLICANT: La Rosa, Thomas J  
; ATTORNEY OR AGENT: Kovalic, David K  
; APPLICANT: Zhou, Yihua  
; APPLICANT: Gao, Yongwei  
; TITLE OF INVENTION: So Nucleic Acid Molecules and Other Molecules Associated With Plants and Uses Thereof for Plant Improvement  
; FILE REFERENCE: 38-21(53223)B  
; CURRENT APPLICATION NUMBER: US/10/424,599  
; CURRENT FILING DATE: 2003-04-28  
; NUMBER OF SEQ ID NOS: 285684  
; SEQ ID NO: 273691  
; LENGTH: 870  
; TYPE: PRT  
; ORGANISM: Glycine max  
; FEATURE:  
; NAME/KEY: unsure  
; LOCATION: (1): (870)  
; OTHER INFORMATION: unsure at all Xaa locations  
; FEATURE:  
; OTHER INFORMATION: Clone ID: PAT\_MRT3847\_89164C.1.pep  
US-10-424-599-273691  
Query Match 77.0%; Score 3501.5; Pred. No. 0;  
Best Local Similarity 75.5%;保守性 73%; Mismatches 103; Indels 35; Gaps 6;  
Matches 649; Conservation 73; Other Information: (1): (870)

111 ED-----EYN-----KESVPMRETVTSRKIGSKPSPRSPGRCORIYDIDPSLTCF 156  
 Qy :||| :||| :||| :||| :||| :||| :||| :||| :||| :|||  
 Db 118 EDGQSSVVSLVDVNIPAKKAVSVEKRSKIVSDBVKPKXIPPGTGORIYEDPSLLAH 177  
 Qy ||| :||| :||| :||| :||| :||| :||| :||| :||| :|||  
 Db 157 RQHLDYRYSOYKRLEIDKYEGLDSLAFSRGEYKFGFSSETGTYREWAPGATWAALIG 216  
 Qy ||| :||| :||| :||| :||| :||| :||| :||| :||| :|||  
 Db 178 RDHLDYRYGKVRCLCYEIDKHEGGDLDTFRGYERKFGFTRSATGTGTYREWAPGAKSAALIG 237  
 Qy ||| :||| :||| :||| :||| :||| :||| :||| :||| :|||  
 Db 217 DFNWNPNADVMTNECGWIEFLPNNAQSGSPPIPHGSRKVIMDTPGSKNSIPANIKF 276  
 Qy ||| :||| :||| :||| :||| :||| :||| :||| :||| :|||  
 Db 238 DFNWNPNADVMTNEFGWIEFLPNNVNGSPPIPHGSRKVIMDTPGSKNSIPANIKF 297  
 Qy ||| :||| :||| :||| :||| :||| :||| :||| :||| :|||  
 Db 277 SVOAPEGELPYNGIYDPPEEEKTYFKNPQPKSLRIVYESHIVMSSTPEVINTYANFRD 336  
 Qy ||| :||| :||| :||| :||| :||| :||| :||| :||| :|||  
 Db 298 SVQAGEIPSGITDPPPEEKTYFKHPQPKSLRIVYESHIVMSSTPEVINTYANFRD 357  
 Qy ||| :||| :||| :||| :||| :||| :||| :||| :||| :|||  
 Db 3358 DVLPRIKLGYNAYQVOLMATEQEHSYTASFGYHVTNHYAASSSRFCSTPDDLKSLIDKAHELGL 396  
 Qy ||| :||| :||| :||| :||| :||| :||| :||| :||| :|||  
 Db 358 DVLPRIKLGYNAYQVIMATEQEHSYTASFGYHVTNHYAASSSRFCSTPDDLKSLIDKAHELGL 417  
 Qy ||| :||| :||| :||| :||| :||| :||| :||| :||| :|||  
 Db 397 LVLDIVHSHASTNTLDGJNMFDTGDGHYFHSGRGHMWMDSRLFNYGSEWNTFLISN 456  
 Qy ||| :||| :||| :||| :||| :||| :||| :||| :||| :|||  
 Db 4118 LVLDIVHSHASNNNTLDGLJNMFDTGCHYFHPGSGRVYHMMWDSSLFNYGSEWFLYLIISN 477  
 Qy ||| :||| :||| :||| :||| :||| :||| :||| :||| :|||  
 Db 4577 ARWLDIYEKFDFGRDGTVSMYTHRGLOYDFTGNYNEYFGYATDVDAVYMLLNDMIH 516  
 Qy ||| :||| :||| :||| :||| :||| :||| :||| :||| :|||  
 Db 478 ARWLDIYEKFDFGRDGTVSMYTHRGLEYAFTGNYNEFGFATDVDAVYMLLNDVIH 537  
 Qy ||| :||| :||| :||| :||| :||| :||| :||| :||| :|||  
 Db 517 GLFPEAVTICGEDVSGMPTYCIPIVEDGGVGFDRYLHMAVADKWEILLQKRDDEKRMGDIYH 576  
 Qy ||| :||| :||| :||| :||| :||| :||| :||| :||| :|||  
 Db 5318 GLFPEAVTICGEDVSGMPTYCIPIVEDGGVGFDRYLHMAZDKWEILKNDDEKRMGDIYH 597  
 Qy ||| :||| :||| :||| :||| :||| :||| :||| :||| :|||  
 Db 577 MLTNERWLKCVCVAESHIQALVGDKTIAFWLMDKDMYFMAIDRPSPLTIDRGVALHKM 636  
 Qy ||| :||| :||| :||| :||| :||| :||| :||| :||| :|||  
 Db 5918 TLTNERWLKCVCVAESHIQALVGDKTIAFWLMKDYMVFMAIDRPSPLTIDRGVALHKM 657  
 Qy ||| :||| :||| :||| :||| :||| :||| :||| :||| :|||  
 Db 6377 IRLITMGCGGEGYLNFMGNFEGHPEWIDPRGDHLPLSSERKVPENNNYDKCRRFRDIGN 696  
 Qy ||| :||| :||| :||| :||| :||| :||| :||| :||| :|||  
 Db 6588 IRLITMGCGGEGYLNFMGNFEGHPEWIDPRGDHLPLSSERKVPENNNYDKCRRFRDIGN 717  
 Qy ||| :||| :||| :||| :||| :||| :||| :||| :||| :|||  
 Db 6977 SKHRYGHMOBFDQIAQHLEAYGFMITSBHOYISRKDERDRDIIYFERNLIVFVNFWHTS 756  
 Qy ||| :||| :||| :||| :||| :||| :||| :||| :||| :|||  
 Db 7118 ADYLRYRGMOBFDQAMQHLEBKFGFMTAHQYISRKNSRNLNTAEYTSEGWYDDRSFLIYAPSR 777  
 Qy ||| :||| :||| :||| :||| :||| :||| :||| :||| :|||  
 Db 7577 SYSDYRGCLKPGKXKIVLDSDDPLFGGGFRLSHDAEHSFEGWYDNPERSEMVYTPCR 816  
 Qy ||| :||| :||| :||| :||| :||| :||| :||| :||| :|||  
 Db 7718 SYSDYRGCLKPGKXKIVLDSDDPLFGGGFRLSHDAEHSFEGWYDNPERSEMVYTPCR 837  
 Qy ||| :||| :||| :||| :||| :||| :||| :||| :||| :|||  
 Db 8117 AVVYAL---VEDEVENEELP 833  
 Qy ||| :||| :||| :||| :||| :||| :||| :||| :||| :|||  
 Db 8318 AVVYALADVEPTLAEEP 857  
 Qy ||| :||| :||| :||| :||| :||| :||| :||| :||| :|||  
 RESULT 2  
 i Sequence 2, Application US/10254534  
 i Publication No. US20030046730A1  
 i GENERAL INFORMATION:  
 i APPLICANT: EK, Bo  
 i APPLICANT: KHOSNOODI, Jamshid  
 i APPLICANT: LARSSON, Clas-Tomas  
 i APPLICANT: LARSSON, Hakan  
 i APPLICANT: RASK, Lars  
 i TITLE OF INVENTION: STARCH BRANCHING ENZYME II OF POTATO  
 i FILE REFERENCE: 003300-486  
 i CURRENT APPLICATION NUMBER: US/10/254,534  
 i CURRENT FILING DATE: 2002-09-26  
 i PRIOR APPLICATION NUMBER: PCT/SE96/01558  
 i PRIOR FILING DATE: 1998-05-29  
 i PRIOR APPLICATION NUMBER: PCT/SE96/01558  
 i PRIOR FILING DATE: 1996-11-28  
 i PRIOR APPLICATION NUMBER: SE 9504272-7

Qy 809 MYTPCRTAVVYALVEDEVENELE 832  
 Db 843 MYAPSPRTAVVYALVTKEEEEE 866

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**RESULT 3**  
**US-10-056-454A-15**  
 ; Publication No. US200301666919A1  
 ; GENERAL INFORMATION:  
   ; APPLICANT: National Starch and Chemical Investment Holding Corporation  
   ; TITLE OF INVENTION: Improvements in or Relating to Plant Starch Composition  
   ; NUMBER OF SEQUENCES: 20  
   ; CORRESPONDENCE ADDRESS:  
     ; ADDRESSEE: National Starch and Chemical Investment Holding Corporation  
     ; STREET: 1000 Unigema Blvd.  
     ; CITY: Newcastle  
     ; STATE: Delaware  
     ; COUNTRY: United States of America  
     ; ZIP: 19720  
   ; COMPUTER READABLE FORM:  
     ; MEDIUM TYPE: Floppy disk  
     ; COMPUTER: IBM PC Compatible  
     ; OPERATING SYSTEM: PC-DOS/MS-DOS  
     ; SOFTWARE: PatentIn Release #1.0, Version #1.30  
   ; CURRENT APPLICATION DATA:  
     ; APPLICATION NUMBER: US/10/056,454A  
     ; FILING DATE: 25-Jun-2002  
   ; INFORMATION FOR SEQ ID NO: 15:  
     ; SEQUENCE CHARACTERISTICS:  
       ; LENGTH: 882 amino acids  
       ; MOLECULE TYPE: protein  
       ; TOPOLOGY: linear

Qy 844 449 VLRPLLSNARWWLDEYKEDGFRDQCVTSMMYTHGLQVDFTGNYNEYFGYATDVDAVYL 508  
 Db 483 VLRVLISNARWWLDPKEEFEFEE 542

Qy 483 VLRVLISNARWWLDPKEEFEFEE 542

Qy 509 MLLNDMTHGLIPEAVTTIGEDVSGMTVCIFPVEDGGVGFDYRLHANAVADKWEIIQCRD 658  
 Db 543 MLVNLDLHGIFPDATIGEDVSGMTCPVQEGVGFDYRLHANADRIELKKRKD 602

Qy 569 WKGDIIVHMLTNRMKLEKCVSYAEEHDQALVGDKTIAFWLMDKMDYEWALDRPSTPLID 628  
 Db 603 WRVGGDVHHLTNRMSEKCVSYAEEHDQALVGDKTIAFWLMDKMDYEWALDRPSTSLID 662

Qy 629 RGVALHKMIRLITNGLGEGYLNEMGNENFGHPEWIDPRGDLLHPSGKWPQGNNYSYDKC 688  
 Db 663 RGIAHKMIRLVNGLGEGYLNEMGNENFGHPEWIDPRGDLSGDSVTPGNOFSYDKC 722

Qy 689 RRFLDGLNSKHLRYGMQEDQATQHLEAYGFMTESEHOYISRKEDERLIVFREGNLVF 748  
 Db 723 RRFLDGLDAEYLTRGLQEDFRPMQYLEDKYEFMTSEHQFISRKEDGDRMIVFREGNLVF 782

Qy 749 VENFHMTSSSDYRVGCLPKGKYK1VLDSDDPLFCGFGRSLSHDAEHFSPEGWYDNPRSF 808  
 Db 783 VNFNFWTKSYSDYRACLKEPGKVYALDDDPFLFGFGFRIDHNAFYFTPEGWYDDPRSI 842

Qy 809 MVYTCRTAVVYALV--EDEVENLEPYA 835  
 Db 843 MVYACRTAVVYALVDEKEEEEEEVEEVA 872

RESULT 4  
 US-10-437-963-154157  
 ; Sequence 154157, Application US/10437963  
 ; Publication No. US20040123343A1  
 ; GENERAL INFORMATION:  
   ; APPLICANT: La Rosa, Thomas J.  
   ; APPLICANT: Kovalic, David K.  
   ; APPLICANT: Zhou, Yihua  
   ; APPLICANT: Cao, Yongwei  
   ; APPLICANT: Wu, Wei  
   ; APPLICANT: Boukharov, Andrey A.  
   ; APPLICANT: Barzak, Brad  
   ; APPLICANT: Li, Ping  
   ; TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated with  
     ; Title of Invention: Plants and Uses Thereof for Plant Improvement  
     ; File Reference: 38-21(5321)B  
     ; Current Application Number: US/10/437,963  
     ; Current Filing Date: 2003-05-14  
     ; Number of SEQ ID NOS: 204966  
     ; SEQ ID NO: 154157  
     ; LENGTH: 841  
     ; TYPE: PRT  
     ; ORGANISM: Oryza sativa  
     ; FEATURE:  
     ; OTHER INFORMATION: Clone ID: PAT\_MRT4530\_54044C.1.pep  
 US-10-056-454A-15

Query Match 73.8%; Score 3356; DB 14; Length 882;  
 Best Local Similarity 70.9%; Pred. No. 9.6e-312; Gaps 6;  
 Matches 617; Conservative 96; Mismatches 119; Indels 38; Gaps 6;

Qy 4 YTISGIRFPCAP-LCKSQSTGFHGYRTTSSLNFNKEAFERRVFSGKSHESDSSNNMV 62  
 Db 3 YTLGVRFPTVFSVXKSNGSNGDRNANYSVFLKKHSRKLAESSYNSERFPTV 62

Qy 63 TASKRVL-PDRGIECYSSSTQLEAGTWSSESQVLTDVSSLSIMDD---KIVEDEV--- 114  
 Db 63 AASGKVLYPGQDSSQDSSQDSSQEFETESPNSPASTDVDSSTMHASQKTTENDVEPS 122

Qy 115 ----NKESVPMRETVSIRKGS-----KPRSTIPPPGRQRIYD 148  
 Db 123 SDLTGSEVELDFASSQLQLEQGKLEESTKLNTSEETLIDESDRTRGIPPGQKIVYE 182

Qy 149 IDPSLJRGFRQHLDYRSQYKRLREEIDYKEGSLDAFSRGYEVFGSRSETGTYREWAPG 208  
 Db 183 IDPLLTNYRQHLDYRSQYKRLREALDYKEGGLEBEASRGYEVGMFRTSATGTYREWALG 242

Qy 209 ATWAALJGDEUNWNPAWVNTONECCWETLPNNADGSPPIPHCSRSVKTMRDTPSGND 268  
 Db 243 AQSAALLGDFNNWDANADIMTRNEFQWETLPNNVGDSPAPIHESRVRKMRDTPSGVD 302

Qy 269 SIPAWIKPSVQAPGELPYNGIYDPPBEEKVKPNQPKRPSLRLIYESHVGMSSTEPI 328  
 Db 303 SIPAWIKPSVQAPGELPYNGIYDPPBEEKVKPNQPKRPSLRLIYESHVGMSSTEPI 362

Qy 329 NYANPRFDVDPFRKKGYNQVOLMAlQEHSYASGHyTINFYAASSRGTPDDLKSLL 388  
 Db 363 NSYVNFRDEVLPRIKKGYNQLMAlQEHSYASGHyTINFAPSSRGTPDDLKSLL 422

Qy 389 DKAHEGLLYVMDIVRSHAStMNLGIMFMGTGHDYFHSOPRGHWWMDSLRFLFYGSE 448  
 Db 423 DKAHEGLLYVMDIVRSHAStMNLGIMFMGTGHDYFHSOPRGHWWMDSLRFLFYGSE 482

Qy 449 VLRPLLSNARWWLDEYKEDGFRDQCVTSMMYTHGLQVDFTGNYNEYFGYATDVDAVYL 508  
 Db 483 VLRVLISNARWWLDPKEEFEFEE 542

Qy 509 MLLNDMTHGLIPEAVTTIGEDVSGMTVCIFPVEDGGVGFDYRLHANAVADKWEIIQCRD 658  
 Db 543 MLVNLDLHGIFPDATIGEDVSGMTCPVQEGVGFDYRLHANADRIELKKRKD 602

Qy 569 WKGDIIVHMLTNRMKLEKCVSYAEEHDQALVGDKTIAFWLMDKMDYEWALDRPSTPLID 628  
 Db 603 WRVGGDVHHLTNRMSEKCVSYAEEHDQALVGDKTIAFWLMDKMDYEWALDRPSTSLID 662

Qy 629 RGVALHKMIRLITNGLGEGYLNEMGNENFGHPEWIDPRGDLLHPSGKWPQGNNYSYDKC 688  
 Db 663 RGIAHKMIRLVNGLGEGYLNEMGNENFGHPEWIDPRGDLSGDSVTPGNOFSYDKC 722

Qy 689 RRFLDGLNSKHLRYGMQEDQATQHLEAYGFMTESEHOYISRKEDERLIVFREGNLVF 748  
 Db 723 RRFLDGLDAEYLTRGLQEDFRPMQYLEDKYEFMTSEHQFISRKEDGDRMIVFREGNLVF 782

Qy 749 VENFHMTSSSDYRVGCLPKGKYK1VLDSDDPLFCGFGRSLSHDAEHFSPEGWYDNPRSF 808  
 Db 783 VNFNFWTKSYSDYRACLKEPGKVYALDDDPFLFGFGFRIDHNAFYFTPEGWYDDPRSI 842

Qy 809 MVYTCRTAVVYALV--EDEVENLEPYA 835  
 Db 843 MVYACRTAVVYALVDEKEEEEEEVEEVA 872

Qy 844 729 SSTDQLEAPGTVS-----EESQVLTDVESLIMDDKIVEDEVKESVPMRETVSIRK 129  
 Db 40 FRRKDSFSRQEVSCAGAPGKVLVPQGGSDLSSAEPDVETQBOPEESQIPDDNMVKPF 99

Qy 79 SSTDOLEAPGTVS-----EESQVLTDVESLIMDDKIVEDEVKESVPMRETVSIRK 129  
 Db 100 EE-EPIPAAEASIKVVAEDKLESSEVIODIE----ENVTEGVYTKDABEPVBS----- 147

Qy 130 IGSKERSIIPPGRGCRYIDPDSLTFGRHLDYRSQYKRLREPIDKREGSLDAFSRGYB 189

Qy 148 -DKEFVIPPGRGCRYIDPDSLTFGRHLDYRSQYKRLREPIDKREGSLDAFSRGYB 205

Qy 190 KFGPFRSERSETGITYREWAPGATWAALIGDFNNWNPNADYMTQECGWEIFLPNNADGSPP 249



Patent No. US20020002713A1  
 GENERAL INFORMATION:  
 APPLICANT: Allen, Steve  
 BECKLES, Diane M.  
 BUTLER, Karia  
 PEARLTAIN, Rich  
 TITLE OF INVENTION: Starch Branching Enzyme IIB  
 FILE REFERENCE: BB1439 US NA  
 CURRENT APPLICATION NUMBER: US/09/792,127  
 CURRENT FILING DATE: 2001-02-23  
 PRIOR APPLICATION NUMBER: 60/186098  
 PRIOR FILING DATE: 2000-03-01  
 NUMBER OF SEQ ID NOS: 5  
 SEQ ID NO: 4  
 LENGTH: 855  
 TYPE: PRT  
 ORGANISM: Triticum aestivum  
 OTHER INFORMATION: Clone ID: PAT\_MRT4530\_18076C.1.pep  
 SEQ ID NO: 114379  
 LENGTH: 825  
 TYPE: PPT  
 ORGANISM: Oryza sativa  
 FEATURE:  
 Query Match 69.9%; Score 3176; DB 16; Length 825;  
 Best Local Similarity 70.3%; Pred. No. 1.5e-294;  
 Matches 586;保守型 86; Mismatches 117; Indels 44; Gaps 7;  
 Software: IRFPCAPLCKSQSQTGFHYRTSSCLSFNFNPEAFSRVFSKSSHESDSSNVMFTAS---  
 Db 20 VRFPY----PAGARSWAAAELPT--SRSLLSGRRFPAVRVGGSGGRVAVRAGAS 70  
 Qy 66 -KRVLPDGRIE--CYSSSTDOLEARPGTVSB-----ESQVLTDVESLIMDDKIVE 111  
 Db 71 GEVNIPGEEDGMPVSAGSDDQLQPLALDDDELSSTEVGAEEVESSGASDVBSV---KRVV 126  
 Query Match 69.7%; Score 3170; DB 9; Length 855;  
 Best Local Similarity 70.9%; Pred. No. 6.1e-294;  
 Matches 592;保守型 81; Mismatches 130; Indels 32; Gaps 8;  
 Software: IRFPCAPLCKSQSQTGFHYRTSSCLSF--NFKEAFSRRVFSKSSHES---SDSS 58  
 Db 127 EELAE-----QKPRVRYVPTGDKQKIFQMDMSMLNGKXHLYTTRSYLRR 172  
 Qy 112 DEVNKESVPRRETWSIRKIGSKPRSPRSTPPGRRGORIYIDDSLTLGPRQLHDYRSQYKRLR 171  
 Db 172 EEDKRGSSJDASFRGYEKFGFSRSTGTITYREWAAGTAAVALLGDENNNNPNAVDMTN 231  
 Db 173 SDIDOYEGLETFSGYEKFGFSRAGTVAEVTYREWAAGAHASALVGDNNNNPNAVDMSRN 232  
 Qy 59 NWNTVASKRVLDDGRIBCYSSSTDQLEAPGTVSBEQSVL---TDVESLIMD---DKIVE 111  
 Db 90 EVMI-----PDGGGGTPPSID---GPQFQFDDLKVPFDDETSLDQGDEDSIMS 137  
 Db 233 ERGWEIFLNNADDESSPIPHGSRYKVRMTPGKIDSIAWIKISVOAQACEIPYNGIYY 292  
 Qy 112 DEVNK--ESVPWRETTSRKIGS--KPRSIPIPGRGORIYIDDPSTLCFGFRQHLDYRSQ 166  
 Db 174 NWNTVASKRVLDDGRIBCYSSSTDQLEAPGTVSBEQSVL---TDVESLIMD---DKIVE 111  
 Db 138 SNTQVSBEIADETSMDKESSTREKLRLPPGNGQOYIEIDPTRLDFKHYLBYRYSL 197  
 Qy 167 YKRRLREIDKYGSSLDAFSRGYEKFGFSRSEGVTCITYREWAAGTAAVALLGDENNNNPNAVD 226  
 Db 198 YERRISDIDHEEGGMDFESRGYEKFGFMRSAEGTITYREWAAGDAAVLGDFDNWDPNAD 257  
 Db 292 DPPEREKTYKPNQSKPRPKSKLRIYESHVGMSSTEPIVNTANPRDDVLPLRIKKLGYNQ 351  
 Qy 293 DPPEREKTYKPNQSKPRPKSKLRIYESHVGMSSTEPIVNTANPRDDVLPLRIKKLGYNQ 352  
 Db 352 LMA1OEHAYSAFSGHTVNTFYAASSRFGTDDPLKSLIDKAHBLGLVLMDDVHSASNT 411  
 Db 353 LMA1OEHAYSGFGHVINFAPSSRFGTDDPLKSLIDKAHBLGLVLMDDVHSASNT 412  
 Qy 412 LDG1NMEDGTDGHYPHSGPGRHHWWMDSRLENFGSWEILFLPSNARWMLDEYKEDGERF 471  
 Db 413 LDGLNGFDGTDTHYFGSGCHWWMDSRLENFGYNGWEVLFPLLSNARWMLDEYKEDGERF 472  
 Qy 472 DGTSMYMYTHGLQDFTGTYNEYCGATDVAVYLMLNDMIGLEPRAVITGDBDSG 531  
 Db 473 DGTSMYMYTHGLQDFTGTYNEYCGATDVAVYLMLNDMIGLEPRAVITGDBDSG 532  
 Qy 532 MPTVCTIPVEDGGVGFDRYLRMNAVADKWKVELIQKRDDEDWKGDIVMLTNRRWLKCVSYA 591  
 Db 533 MPTFALPVQOGGVGFDRYLRMNAVDPWIEMLKOSDSEWRKGDIVHTLNRRWLKCVSYA 592  
 Qy 592 ESHDQALVQGKTIATWLMDDKMDYDMALDPSPLIDRGYALHKMTRLITMGEGYLN 651  
 Db 652 FMGNBFRGHPPWIDPRGDLLHPSKGKPVPGNNSYDKCRREDFLGNSKHLRYHMOPEDQA 711  
 Qy 653 PMGNBFRGHPPWIDPRGDLLHPSKGKPVPGNNSYDKCRREDFLGNSKHLRYHMOPEDQA 712  
 Db 593 ESHDQALVQGKTIATWLMDDKMDYDMALDPSPLIDRGYALHKMTRLITMGEGYLN 652  
 Qy 712 IOHLEBAYGFTMSEHOYISRKDERDRIIVPERGMLYVFNFHWTWSSYSDYRGLCKPKY 771  
 Db 713 MQSLBEKYGPMNTSDQYISRKHEEDMIIFEKGDLFVFNFWHWSNFSRVCYVYAPAE 825  
 Qy 772 KIVLSDSDPPLFGGFBLSHDAEHESFEGWMVDRNRPSEMVNTPCRRAVYALVE 824  
 Db 773 KVVLDSDAFLFGGFERIHTAEHTADCSDNRPYSFSVSPSRCTVYVYAPAE 825  
 Qy 826 CYSYABSHDOALVGDTIAFWMDKMDYDFMALDRPSPLIDRGVALHKMIRLITMGEG 646  
 Db 618 CYTAEHSQALVGDTIAFWMLDKMDYDFMALNGPSPNIDRGIALHKMIRLITMGEG 677  
 Db 647 EGYLNFGNNEFGHPWEWIDPRGDLLHPSKGKFVPGNNSYDKCRREDFLGNSKHLRYHMOPEDQA 706  
 Db 678 EGYLNFGNNEFGHPWEWIDPRGDLLHPSKGKFVPGNNSYDKCRREDFLGNSKHLRYHMOPEDQA 737

RESULT 7  
 Sequence 4, Application US/09792127  
 US-09-792-127-4

RESULT 9  
US-10-336-753-70  
Query Sequence 70, Application US/10336753  
; Publication No. US20030226176A1  
; GENERAL INFORMATION:  
; APPLICANT: Guan, Hanping  
; APPLICANT: Keeling, Peter L.  
; TITLE OF INVENTION: PLANT LIKE STARCHES AND THE METHOD OF MAKING THEM IN  
; FILE REFERENCE: 2461-52  
; CURRENT APPLICATION NUMBER: US/10/336,753  
; CURRENT FILING DATE: 2003-01-06  
; PRIOR APPLICATION NUMBER: US/09/402,254  
; PRIOR FILING DATE: 1999-10-01  
; PRIORITY NUMBER: EARLIER APPLICATION NUMBER: PCT/US98/066660  
; PRIOR FILING DATE: EARLIER FILING DATE: 1998-04-03  
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/042,939  
; PRIOR FILING DATE: EARLIER FILING DATE: 1997-04-04  
; NUMBER OF SEQ ID NOS: 77  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO: 70  
; LENGTH: 798  
; TYPE: PRT  
; ORGANISM: Zea mays  
; US-10-336-753-70

Query Match 69.7%; Score 3166.5; DB 12; Length 798;  
Best Local Similarity 74.2%; Pred. No. 1.2e-293;  
Matches 572; Conservative 80; Mismatches 80; Indels 39; Gaps 4;

Qy 64 ASKRVNPDG-----REICYSSTSDQLEAFTVSEESQV--LTDVSESLIMDDKIVEDE 113  
Db 57 ARKAMVPEGNDGLASRADSAQFQSDELEVY-DISSETTCAGADAQL----- 105  
Qy 114 VNKESVPMRETYSIRKIGSKRSRSTIPPPGRCORIYDIDPSLTGRFHLDYRSQVKRLREE 173  
Db 106 -----NRTRVVPSGDKTQFQDPMLQGYKTHLETVSYLRRIRD 147  
Qy 174 IDKYESLDAFSRGYKEFGPSRSETGTTIREWAGTWAALIGDPNNWNPAWNTQNEC 233  
Db 148 IDEHEGGLEAFSRSYKEFGFASAEGTYREWAPGAFAALVGDNWDPAADMMSKNEF 207  
Qy 234 GWWEIFLPNNADGSPPP1PHGSRK1RMDTPSGNKDSIAPAWTKFSYQAPGELPYNGIYDP 293  
Db 208 GWWEIFLPNNADGSTSP1PHGSRKVMDTPGKOSIPAKTYSQAPGELPYDIYDP 267  
Qy 294 PEEEKVFKNPQPKRSKSLR1YESHVGMSSTEPIVNTYANFRDDVLPRTRKLGNNAVOLM 353  
Db 268 PEEVKVCFRHQPKRSKSLR1YESHVGMSSEPKINTYVNFRDEVLPTRTRKLGNNAVQM 327  
Qy 414 GLNMFDSTGHYFHSGPGRHMMWDSSLFNSAWKWLDFYKEDGFRFDG 473  
Db 388 GLNGFDSTDTHFHSGPGRHMMWDSSLFNSAWKWLDFYKEDGFRFDG 447  
Qy 474 VTSMYTHGLQYDFTGNYNEYFGTADYVYLLNDM1HGLPPEAVTIGEDVSMP 533  
Db 448 VTSMYTHGLQYDFTGNYNEYFGTADYVYLLNDM1HGLPPEAVTIGEDVSMP 507  
Qy 534 TVCIPVEDGGCFDYRLHMAVADKXVEIIQKRDEWDKGDOIYHMLTRNRMLKEKCVSYAAB 593  
Db 508 TFLAPVHDGGFDYRMHMAVADKXVLLQKSDETVRMGDIVHTLNRMLKEKCVSYAAB 567

RESULT 9  
US-10-336-753-54  
; Sequence 54, Application US/10336753  
; Publication No. US20030226176A1  
; GENERAL INFORMATION:  
; APPLICANT: Guan, Hanping  
; APPLICANT: Keeling, Peter L.  
; TITLE OF INVENTION: PLANT LIKE STARCHES AND THE METHOD OF MAKING THEM IN  
; FILE REFERENCE: 2461-52  
; CURRENT APPLICATION NUMBER: US/10/336,753  
; CURRENT FILING DATE: 2003-01-06  
; PRIOR APPLICATION NUMBER: US/09/402,254  
; PRIOR FILING DATE: 1999-10-01  
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: PCT/US98/066660  
; PRIOR FILING DATE: EARLIER FILING DATE: 1998-04-03  
; PRIOR APPLICATION NUMBER: EARLIER FILING DATE: 1997-04-04  
; NUMBER OF SEQ ID NOS: 77  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO: 54  
; LENGTH: 870  
; TYPE: PRT  
; ORGANISM: Zea mays  
; US-10-336-753-54

Query Match 69.7%; Score 3166.5; DB 12; Length 870;  
Best Local Similarity 74.2%; Pred. No. 1.e-293;  
Matches 572; Conservative 80; Mismatches 80; Indels 39; Gaps 4;

Qy 64 ASKRVNPDG-----REICYSSTSDQLEAFTVSEESQV--LTDVSESLIMDDKIVEDE 113  
Db 57 ARKAMVPEGNDGLASRADSAQFQSDELEVY-DISSETTCAGADAQL----- 105  
Qy 114 VNKESVPMRETYSIRKIGSKRSRSTIPPPGRCORIYDIDPSLTGRFHLDYRSQVKRLREE 173  
Db 106 -----NRTRVVPSGDKTQFQDPMLQGYKTHLETVSYLRRIRD 147  
Qy 174 IDKYESLDAFSRGYKEFGPSRSETGTTIREWAGTWAALIGDPNNWNPAWNTQNEC 233  
Db 148 IDEHEGGLEAFSRSYKEFGFASAEGTYREWAPGAFAALVGDNWDPAADMMSKNEF 207  
Qy 214 VNKESVPMRETYSIRKIGSKRSRSTIPPPGRCORIYDIDPSLTGRFHLDYRSQVKRLREE 207  
Db 106 -----NRTRVVPSGDKTQFQDPMLQGYKTHLETVSYLRRIRD 113  
Qy 294 PEEEKVFKNPQPKRSKSLR1YESHVGMSSTEPIVNTYANFRDDVLPRTRKLGNNAVOLM 353  
Db 268 PEEVKVCFRHQPKRSKSLR1YESHVGMSSEPKINTYVNFRDEVLPTRTRKLGNNAVQM 327  
Qy 354 AIQEHSSYASFGTNTFYAASSRFTGPDPDKLSLIDKAHELG1LVMDIVYHSHASTNTLD 413  
Db 328 AIQEHSSYASFGTNTFYAASSRFTGPDPDKLSLIDKAHELG1LVMDIVYHSHASTNTLD 387  
Qy 474 VTSMYTHGLQYDFTGNYNEYFGTADYVYLLNDM1HGLPPEAVTIGEDVSMP 533  
Db 448 VTSMYTHGLQYDFTGNYNEYFGTADYVYLLNDM1HGLPPEAVTIGEDVSMP 507  
Qy 534 TVCIPVEDGGCFDYRLHMAVADKXVEIIQKRDEWDKGDOIYHMLTRNRMLKEKCVSYAAB 593  
Db 508 TFLAPVHDGGFDYRMHMAVADKXVLLQKSDETVRMGDIVHTLNRMLKEKCVSYAAB 567

RESULT 9  
US-10-336-753-53  
; Sequence 53, Application US/10336753  
; Publication No. US20030226176A1  
; GENERAL INFORMATION:  
; APPLICANT: Guan, Hanping  
; APPLICANT: Keeling, Peter L.  
; TITLE OF INVENTION: PLANT LIKE STARCHES AND THE METHOD OF MAKING THEM IN  
; FILE REFERENCE: 2461-52  
; CURRENT APPLICATION NUMBER: US/10/336,753  
; CURRENT FILING DATE: 2003-01-06  
; PRIOR APPLICATION NUMBER: US/09/402,254  
; PRIOR FILING DATE: 1999-10-01  
; PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: PCT/US98/066660  
; PRIOR FILING DATE: EARLIER FILING DATE: 1998-04-03  
; PRIOR APPLICATION NUMBER: EARLIER FILING DATE: 1997-04-04  
; NUMBER OF SEQ ID NOS: 77  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO: 54  
; LENGTH: 870  
; TYPE: PRT  
; ORGANISM: Zea mays  
; US-10-336-753-53

Query Match 69.7%; Score 3166.5; DB 12; Length 870;  
Best Local Similarity 74.2%; Pred. No. 1.e-293;  
Matches 572; Conservative 80; Mismatches 80; Indels 39; Gaps 4;

Qy 64 ASKRVNPDG-----REICYSSTSDQLEAFTVSEESQV--LTDVSESLIMDDKIVEDE 113  
Db 57 ARKAMVPEGNDGLASRADSAQFQSDELEVY-DISSETTCAGADAQL----- 105  
Qy 114 VNKESVPMRETYSIRKIGSKRSRSTIPPPGRCORIYDIDPSLTGRFHLDYRSQVKRLREE 173  
Db 106 -----NRTRVVPSGDKTQFQDPMLQGYKTHLETVSYLRRIRD 147  
Qy 174 IDKYESLDAFSRGYKEFGPSRSETGTTIREWAGTWAALIGDPNNWNPAWNTQNEC 233  
Db 148 IDEHEGGLEAFSRSYKEFGFASAEGTYREWAPGAFAALVGDNWDPAADMMSKNEF 207  
Qy 214 VNKESVPMRETYSIRKIGSKRSRSTIPPPGRCORIYDIDPSLTGRFHLDYRSQVKRLREE 207  
Db 106 -----NRTRVVPSGDKTQFQDPMLQGYKTHLETVSYLRRIRD 113  
Qy 294 PEEEKVFKNPQPKRSKSLR1YESHVGMSSTEPIVNTYANFRDDVLPRTRKLGNNAVOLM 353  
Db 268 PEEVKVCFRHQPKRSKSLR1YESHVGMSSEPKINTYVNFRDEVLPTRTRKLGNNAVQM 327  
Qy 354 AIQEHSSYASFGTNTFYAASSRFTGPDPDKLSLIDKAHELG1LVMDIVYHSHASTNTLD 413  
Db 328 AIQEHSSYASFGTNTFYAASSRFTGPDPDKLSLIDKAHELG1LVMDIVYHSHASTNTLD 387  
Qy 474 VTSMYTHGLQYDFTGNYNEYFGTADYVYLLNDM1HGLPPEAVTIGEDVSMP 533  
Db 448 VTSMYTHGLQYDFTGNYNEYFGTADYVYLLNDM1HGLPPEAVTIGEDVSMP 507  
Qy 534 TVCIPVEDGGCFDYRLHMAVADKXVEIIQKRDEWDKGDOIYHMLTRNRMLKEKCVSYAAB 593  
Db 508 TFLAPVHDGGFDYRMHMAVADKXVLLQKSDETVRMGDIVHTLNRMLKEKCVSYAAB 567



RESULT 12  
 US-10-336-753-56  
 Sequence 55, Application US/10336753  
 Publication No. US20030225176A1  
 GENERAL INFORMATION:  
 APPLICANT: Kee, Peter L.  
 ATTORNEY OR AGENT: Harping, Guan  
 TITLE OF INVENTION: PLANT LIKE STARCHES AND THE METHOD OF MAKING THEM IN  
 CURRENT APPLICATION NUMBER: US/10/336753  
 CURRENT FILING DATE: 2003-01-06  
 PRIORITY NUMBER: US/09/402,254  
 PRIORITY FILING DATE: 1999-10-01  
 PRIORITY NUMBER: 1998-04-03  
 PRIORITY FILING DATE: 1998-04-03  
 NUMBER OF SEQ ID NOS: 77  
 SOFTWARE: PatentIn Ver. 2.1  
 SEQ ID NO: 56  
 LENGTH: 776  
 TYPE: PRT  
 ORGANISM: Zea mays  
 US-10-336-753-56

RESULT 13  
 US-10-336-753-56  
 Sequence 55, Application US/10336753  
 Publication No. US20030225176A1  
 GENERAL INFORMATION:  
 APPLICANT: Kee, Peter L.  
 ATTORNEY OR AGENT: Harping, Guan  
 TITLE OF INVENTION: PLANT LIKE STARCHES AND THE METHOD OF MAKING THEM IN  
 CURRENT APPLICATION NUMBER: US/10/336753  
 CURRENT FILING DATE: 2003-01-06  
 PRIORITY NUMBER: US/09/402,254  
 PRIORITY FILING DATE: 1999-10-01  
 PRIORITY NUMBER: 1998-04-03  
 PRIORITY FILING DATE: 1998-04-03  
 NUMBER OF SEQ ID NOS: 77  
 SOFTWARE: PatentIn Ver. 2.1  
 SEQ ID NO: 56  
 LENGTH: 776  
 TYPE: PRT  
 ORGANISM: Zea mays  
 US-10-336-753-56

Query Match 46.7%; Score 2124; DB 12; Length 776;  
 Best Local Similarity 56.1%; Pred. No. 9.6-194; Mismatches 167; Index 26; Gaps 6;

Query 146 IYDPLSLGFGFHQHUYRSQYKRLREEDKYESSLDASRGYKEFGFSRSETCITYREW 205  
 Db 21 IYDPLSLGFGFHQHUYRSQYKRLREEDKYESSLDASRGYKEFGFSRSETCITYREW 80

Query 206 APGATWAALIJDGFNNWNPNADWMTQNECCWWEFLPNADGSPPJPHGSRVKJRMNTPSG 265  
 Db 81 APAAGEAELIGFDNDWNGANHOMEDKFEGVWSIKI-DHYKGKPAIPHNSKVKPRFLHGGV 139

Query 313 RIYESHVGMSSTEPIVNTYANFRDDVLPRIKKLGYNAVOLMAIOEHSYYASFGHTVNFTY 372  
 Db 184 RIYETHVGMSPEPKINTYANFRDELPTRKLRLGNNAVQMAIQEHSYYASFGHTVNFT 243

Query 373 AASSRFGTPODLKSLIDKAHELGLLVMIDIVHSHASTNTLDGLNMFDGTDGHYHSGPREG 432  
 Db 244 APSSRFGSPEDOLKSLIDRAHELGLVVLMDVVSHASNNTLDGLNGCFDTDHYHGGSRG 303

Query 433 HWMWDSRLLFNGSWEVLRFLLSNARWWLDBYKFGPFRFGUTSMYTHGLQYDFGTNY 492  
 Db 304 HWMWDSRVEFNFGNKEVIRFLLSNARWWLEYKFGFGRFTGATSMYTHGLQYDFGTNY 363

Query 493 NEFGTYATDVDAVYIMLNDMIGELFPEAVTIGEDVSMPITVCI PVEDFGVGDYRILM 552  
 Db 364 HEYFGPATDVDAVYIMLNDMIGELFPEAVTIGEDVSMPITVCI PVEDFGVGDYRILM 423

Query 553 AVADKWKETIOKRDEWDKMGDIVHMLTNRRLWCKCVSYAESHDQALGVKTIAFWLMDKD 612  
 Db 424 AVADKWIELLKGNDDEAWEMGNVHTLNRRLWCKCVSYAESHDQALGVKTIAFWLMDKD 483

Query 613 MYDFMALDRPSTPLIDRGVALHMRMLITMLGGEGYLNFMGNFEGHPWMDPFRGDLIL 672  
 Db 484 MYDFMALNGPSTPNIDRGIAHKMRLITMLGGEGYLNFMGNFEGHPWMDPFRGPQWL 543

Query 673 PSGKFVPGNNYSYDKCRRFDLGNSKHLRYTHGMQEFDQAIQHLEBAYGMFTSEHQYISK 732  
 Db 544 PSGKFVPGNNYSYDKCRRFDLGDAEFLRTHGMQOFDQAMQHLEBKYGMFTSDQYVSK 603

Query 733 DERDRIVFERGNYLVEFNPHWTSSYSDYRVGCLPKGKYKIVLSDDPFLFGGPERLSDHA 792  
 Db 604 HEEDKVTFERGDLVVFNTWHTSSYSDYRVGCLPKGKYKIVLSDDPFLFGGPERLSDHA 663

Query 793 EHFSFEGWYDNPRPSMMYTPCRTAVYA 821  
 Db 664 EHVTSDCQHDNRPHSFSVYTPSRTCVVYA 692

RESULT 14  
 Sequence 4, Application US/10254534  
 Publication No. US20030046730A1  
 GENERAL INFORMATION:  
 APPLICANT: Larsson, Claes-Tomas  
 APPLICANT: Larsson, Bo  
 APPLICANT: KHOONODDI, Jamshid  
 APPLICANT: RASK, Lars  
 TITLE OF INVENTION: STARCH BRANCHING ENZYME II OF POTATO  
 CURRENT APPLICATION NUMBER: US/10/254,534  
 CURRENT FILING DATE: 2002-09-26  
 PRIOR APPLICATION NUMBER: US/09/300-486  
 PRIOR FILING DATE: 1998-05-29  
 PRIOR APPLICATION NUMBER: PCT/SE96/01558  
 PRIOR FILING DATE: 1996-11-28  
 PRIOR APPLICATION NUMBER: SE 9504272-7  
 NUMBER OF SEQ ID NOS: 4  
 SOFTWARE: PatentIn Ver. 2.0  
 SEQ ID NO: 4  
 LENGTH: 464  
 TYPE: PRT  
 ORGANISM: Unknown  
 FEATURE:  
 OTHER INFORMATION: Description of Unknown Organism:beII gene fragment (branching enz  
 OTHER INFORMATION: to)

Query Match 48.5%; Score 2204; DB 14; Length 464;  
 Best Local Similarity 84.0%; Pred. No. 8.8e-202;

Qy 266 NKDSIPAWIKFVQAPGL--PYNGIYDPPPEEKVFKNPQPKPKSLRIYESHVGMSS 323  
 Db 140 WVDRIPALRATVDAKDFGTYWDPASSERTFKPKRPSPAAPPIYEAFVGMSS 199  
 Qy 324 TEPVINTYANFRDVLPRIKKLGIVNAVOLMAIQEHSYYASPGYHVTNFYASSRFGTPDD 383  
 Db 200 EKPAVSTYREPADNVLPRIRANNNTVQLMAMVEISYYASFGYAVTNTFAVSSSGTPED 259  
 Qy 384 LKSLIDKAHEGLLVLMDIVVSHASTNTLGLNMF--GTDGHYFHSGPGRGHMMWDSR 440  
 Db 260 LKLVLDKAHSGLRLVLMDDIVVSHASNNVTDGLNGDVGOSTQESYFHAGDRGTHKLWDSR 319  
 Qy 441 LFNYGSWEVLRFLLSNARWLDEYKEDGFREDGFTSMYTMTHGLQYDFTGNYNEYFGYAT 500  
 Db 320 LFNYANWEVLFLLSNRYWDEFMFDGFREDGFTSMYLHNGTNGFTGNYQEYFSLDT 379  
 Db 501 DVDAVYMLLNDMIGLPLEAVTIGEDVSEMPCTCIPVEDGGCFDYRLHMAVADKWTB 560  
 Db 380 AVDAVYMMMLANHMLMKLPLPEAVTVAEDVSMPVLCRPEEGGVCFDYRLAMAIPDRWID 439  
 Qy 561 IIQKRDE-DWKMGDIVHMLTNRRWLCKVSYAESHQDQALVGDKTIAFWLMDKMYDFMAl 619  
 Db 440 YLKNKDDSEWMSGEIAHTLNRTYTKCAYAESHDQSIVGDKTIAFWLMDKEMYTGMSD 499  
 Qy 620 DRPSTPLIDRGCVALKHMRILITMGIGGEYTLINFMGENEFQHPWEIDFPKGDLHLPSGKFYP 679  
 Db 500 LQASPTPDIGTALQRMHIFTMAGDGTLYNFMGENEFQHPWEIDFPK-----E 548  
 Qy 680 GNNYSYDKCRREPFLGNSKHLRYHGMOEQDQAHLEBAYGEMTSBHQYISRKDERDRII 739  
 Db 549 GNNWSYDKCRQWSLVDTDHRYKYMNAFDQAMNALDERSFSLSSSKOIVSDMNEEKVI 608  
 Qy 740 VFERGNLVPVNEHWMTSSYSDYRGCLKPGKYKIVLDDPLFGGRGRLSHDAEHFSF-- 797  
 Db 609 VFERGDLVFEVNHPKXTYEGKVKGCDLPGKYRVALDSLALFGSHGRVGDVDHFTSSPE 668  
 Qy 798 -----EGWYDNRPRSFMVYTPCRATAVYALVED 825  
 Db 669 GVPGVETFNRFNRNPSPFKVLSPPRTCVAYRVDE 702

RESULT 14  
 US-10-171-008-9  
 Sequence 9, Application US/10171008  
 Publication No. US20030126633A1  
 GENERAL INFORMATION:  
 APPLICANT: Ursula Uwer  
 APPLICANT: Claus Frohberg  
 APPLICANT: Jens Pilling  
 APPLICANT: Volker Landschutze  
 TITLE OF INVENTION: Transgenic plants synthesising high amylose starch  
 FILE REFERENCE: VOS-36  
 CURRENT APPLICATION NUMBER: US/10/171,008  
 CURRENT FILING DATE: 2002-09-13  
 PRIOR APPLICATION NUMBER: DE 10 12 8363 .6  
 PRIOR FILING DATE: 2001-06-12  
 NUMBER OF SEQ ID NOS: 10  
 SOFTWARE: PatentIn version 3.1  
 SEQ ID NO 9  
 LENGTH: 822  
 TYPE: PRT  
 ORGANISM: Zea mays  
 US-10-171-008-9

Query Match 46.7%; Score 2124; DB 14; Length 822;  
 Best Local Similarity 56.1%; Pred. No. 1.1e-193; Mismatches 112; Indels 26; Gaps 6;  
 Matches 389; Conservative 112; Feature: OTHER INFORMATION: Clone ID: PAT-MRT4530\_68681C.1.pep  
 Qy 146 IYDIDPSLTGPQRHLDYRSQYKRLREEDIKYEGSULDAFSRGYKEKGFSSETGITYRW 205  
 Db 84 IYDLDPLKLEIJKDHFYRMKRPLEQKGSIENEGLESFSKGYKLFQGINTNEDGTVYRRW 143  
 Qy 206 APGATWAALIGDFFNNNNNNPNAADMVTQNECGYWEIFLPNNAGSPP1PHGGSRKVLRMDTPSG 265

Db 144 APAQEAELIGDFNDWNGANHMRKEDKFGWWSIKI-DHVKGKPAIPHNSKVKFRLHGG 202  
 Qy 266 NKDSIPAWIKFVQAPSVQAPGL--PYNGIYDPPPEEKVFKNPQPKPSLRIVYSHVGMS 323  
 Db 203 WVDRIPALRATVDAKDFGTYWDPASSERTFKPKRPSPAAPPIYEAFVGMSS 262  
 Qy 324 TEPVINTYANFRDVLPRIKKLGIVNAVOLMAIQEHSYYASPGYVTFNTFYAASSRFGTPDD 383  
 Db 263 EKPAVSTYREPADNVLPRIRANNNTVQLMAMVEISYYASFGYAVTNTFAVSSSGTPED 322  
 Qy 384 LKSLIDKAHEGLLVLMDIVVSHASTNTLGLNMF--GTDGHYFHSGPGRGHMMWDSR 440  
 Db 323 LKLVLDKAHSGLRLVMDVVVSHASNNVTDGLNGDVGOSTQESYFHAGDRGTHKLWDSR 382  
 Db 441 LENGYGSWEVLRFLLSNARWLDEYKEDGFREDGFTGNYNEYFGYAT 500  
 Db 383 LENFANWEYLRFLSNLRFLWDLDFGRFQDFGTYWMLYTHHHRGJNNGFTGNYQEFSLDT 442  
 Qy 501 DVDAVYMLLNDMIGLPLEAVTIGEDVSEMPCTCIPVEDGGCFDYRLHMAVADKWTB 560  
 Db 443 AVDAVYMMMLANHMLMKLPLPEAVTVAEDVSMPVLCRPEEGVCFDYRLAMAIPDRWID 502  
 Qy 561 IIQKRDE-DWKMGDIVHMLTNRRWLCKVSYAESHQDQALVGDKTIAFWLMDKMYDFMAl 619  
 Db 503 YLKNKDDSEWMSGEIAHTLNRTYTKCAYAESHDQALVGDKTIAFWLMDKEMYTGMSD 562  
 Db 620 DRPSTPLIDRGCVALKHMRILITMGIGGEYTLINFMGENEFQHPWEIDFPKGDLHPSGKFYP 679  
 Db 563 LQASPTPDIGTALQRMHIFTMAGDGTLYNFMGENEFQHPWEIDFPK-----E 611  
 Qy 680 GNNYSYDKCRREPFLGNSKHLRYHGMOEQDQAHLEBAYGEMTSBHQYISRKDERDRII 739  
 Db 612 GNNWSYDKCRQWSLVDTDHRYKYMNAFDQAMNALDERSFSLSSSKOIVSDMNEEKVI 671  
 Qy 740 VFERGNLVPVNEHWMTSSYSDYRGCLKPGKYKIVLDDPLFGGRGRLSHDAEHFSF - 797  
 Db 672 VFERGDLVFEVNHPKXTYEGKVKGCDLPGKYRVALDSLALFGSHGRVGDVDHFTSSPE 731  
 Qy 798 -----EGWYDNRPRSFMVYTPCRATAVYALVED 825  
 Db 732 GVPGVETFNRFNRNPSPFKVLSPPRTCVAYRVDE 765

RESULT 15  
 US-10-437-963-170346  
 Sequence 170346, Application US/10437963  
 Publication No. US20040123343A1  
 GENERAL INFORMATION:  
 APPLICANT: La Rosa, Thomas J.  
 APPLICANT: Kovalic, David K.  
 APPLICANT: Zhou, Yihua  
 APPLICANT: Cao, Yongwei  
 APPLICANT: Wu, Wei  
 APPLICANT: Boukhacov, Andrey A.  
 APPLICANT: Barbazuk, Brad  
 APPLICANT: Li, Ping  
 TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With  
 PLANTS AND USES THEREOF FOR PLANT IMPROVEMENT  
 FILE REFERENCE: 38-1(5321)B  
 CURRENT APPLICATION NUMBER: US/10/437,963  
 CURRENT FILING DATE: 2003-05-14  
 NUMBER OF SEQ ID NOS: 204966  
 SEQ ID NO 170346  
 LENGTH: 827  
 TYPE: PRT  
 ORGANISM: Oryza sativa  
 FEATURE:  
 OTHER INFORMATION: Clone ID: PAT-MRT4530\_68681C.1.pep  
 US-10-437-963-170346

Query Match 46.6%; Score 2119; DB 16; Length 827;  
 Best Local Similarity 54.0%; Pred. No. 3.2e-193;

	Matches	401;	Conservative	114;	Mismatches	170;	Indels	58;	Gaps	12;
Qy	132	SKPR-----	SIPPPGRCQR	-----	-----	-----	-----	-----	-----	167
Db	40	SSPRRSWPWKYTKTNFSVATARKNTMVTYVEVDHLPYDLDPKLEEFCDHFYTRIKY	99	-----	-----	-----	-----	-----	-----	-----
Qy	168	KRLREELDKEGSLDAFSGYBKFGEFSRSETGITREWAGTAWALIGDFNNVNPNADV	227	-----	-----	-----	-----	-----	-----	-----
Db	100	LDOQKCLIEKGGLEFSKGYLIKFGNTGATIYREWABAQAEQLIGEFNNNGAERK	159	-----	-----	-----	-----	-----	-----	-----
Qy	228	MTQNECCGWEIPLPNNAADGSPPIPHCSRVKIRMDTPSGN-KDSIPAWIKPSVOAPGEL--	284	-----	-----	-----	-----	-----	-----	-----
Db	160	MERDKFGIWSIKI-SIVNGKEAPAPSNSKVERFRHGGAWVDRPAWIRIATPDASKFGA	218	-----	-----	-----	-----	-----	-----	-----
Qy	285	PYNGIYDPPEEEKVKFNPOPQKRKSLSLARYTSHGMSSTEPVINTYAFRFDVLPRTKK	344	-----	-----	-----	-----	-----	-----	-----
Db	219	PYDGVIWDPACERYFKHPKPPKPDAPR1YEAHYGMSCGEPEVSTYRFEPADNYLPRIA	278	-----	-----	-----	-----	-----	-----	-----
Qy	345	LGYNAVQMLAQEHSYAASFYHVTINFAASSSRFTPDJKSLIDKAHEHGLVJMDIVH	404	-----	-----	-----	-----	-----	-----	-----
Db	279	NNYNTVQLMAMEHSYAAASFYHVTINFAASSSRFTPDJKLYDKAHSISGLRVJMDVH	338	-----	-----	-----	-----	-----	-----	-----
Qy	405	SHASTNTLGLNMFD-GTDGHH-YFHSGPGRCHHWWMDSRFLNFYGSWEVRFLLENARWL	461	-----	-----	-----	-----	-----	-----	-----
Db	339	SHASNNTVTDGJINGYDVGNTHESYFRTGDRYHKWDSDRLENYANWEVRFLLENRLTM	398	-----	-----	-----	-----	-----	-----	-----
Qy	462	DEYKEDGFRFGVTSMMYTHHGLQDFTGNNNEYEGAYATDVAYYLMLINDMTHGLPDE	521	-----	-----	-----	-----	-----	-----	-----
Db	399	DEFMFDCFRFDGVTSMYHHRGINKGFTGRKYKEYFSDLDTVDATYMMALHMHKLPS	458	-----	-----	-----	-----	-----	-----	-----
Qy	522	AVTIGEDVSGMPTVCTPYVEDGVGFYDYLIMAVALDKWETLQ-KRDEDKNGDLYHMLTN	580	-----	-----	-----	-----	-----	-----	-----
Db	459	ATIVADESGMPVLCRPyDVGFPFRPLAMAIPRWDYLKNEKDRKMSSEYQYLTN	518	-----	-----	-----	-----	-----	-----	-----
Qy	581	RRWLEKCVSYAESHDIOALVGDKTIAFWLMDKDMTDEMAILDRPSTPLIDREVALHKMIRLI	640	-----	-----	-----	-----	-----	-----	-----
Db	519	RRYTEKCIAYAESHDOSIVGDKTIAFLIMDXEMTGMSDLQPASPTINGIALQKMIHFI	578	-----	-----	-----	-----	-----	-----	-----
Qy	641	TMGLGGEGYLNEMGNEFGHPEWIDFPGDLHLPSGKFCVPGNNYSDKCRREDFDGNKHL	700	-----	-----	-----	-----	-----	-----	-----
Db	579	TMALGEDGYLNFMGNBEGHPPWIDFR-----	627	-----	-----	-----	-----	-----	-----	-----
Qy	701	RY-----HGMQEFDQAIQHLEAYGMTSSEHQYTSRKDERDR1IVEFGRNLVYEVENPH	753	-----	-----	-----	-----	-----	-----	-----
Db	628	RYKVVPKYNTMNAFOQMANEEFFSFLSSSKQVSDNNEKDVKV1VFRGDLVYEVNPFI	687	-----	-----	-----	-----	-----	-----	-----
Qy	754	WTSSYSDYRVGGLKPGKYKVLDSDPPLFGFGFLUSHADBF-SPEGW-----YDNRP	805	-----	-----	-----	-----	-----	-----	-----
Db	688	PNKTYKGKVCGDLPKGKRYVALDSDALVFGCHGRVGHDDHFTSPFGMPGVPEITNNRP	747	-----	-----	-----	-----	-----	-----	-----
Qy	806	RSFMYVTPCRTAVVYALVEDEVE	828	-----	-----	-----	-----	-----	-----	-----
Db	748	NSFKVLSPPRTCVAYYRVEDRE	770	-----	-----	-----	-----	-----	-----	-----

Search completed: July 13, 2004, 16:13:00  
 Job time : 54 secs

Result No.	Score	Query	Match	Length	DB ID	Description
<b>SUMMARIES</b>						
1	3387.5	74.5	878	3	US-09-087-277-2	Sequence 2, Appli
2	3387.5	74.5	878	4	US-09-658-199-2	Sequence 2, Appli
3	3261.5	71.8	814	4	US-09-731-166-10	Sequence 10, Appli
4	3209	70.6	729	4	US-09-609-040-4	Sequence 4, Appli
5	3169	69.7	799	4	US-09-731-166-12	Sequence 12, Appli
6	3160	69.5	799	3	US-08-941-445A-15	Sequence 15, Appli
7	2204	48.5	464	3	US/9/087	Sequence 4, Appli
8	2204	48.5	464	4	US-09-558-499-4	Sequence 4, Appli
9	2192.5	48.2	906	4	US-09-367-895-41	Sequence 41, Appli
10	2124	46.7	822	3	US-08-941-445A-17	Sequence 17, Appli
11	2124	46.7	822	4	US-09-731-166-14	Sequence 14, Appli
12	1635.5	36.0	566	3	US-08-104-158-2	Sequence 2, Appli
13	1635.5	36.0	566	4	US-09-609-040-2	Sequence 2, Appli
14	576	12.5	762	4	US-09-579-365-2	Sequence 2, Appli
15	570	12.5	621	4	US-09-537-120-2	Sequence 2, Appli
16	550.5	12.1	768	4	US-09-489-039A-11131	Sequence 11131, A
17	542.5	11.9	652	3	US-08-528-056C-4	Sequence 4, Appli
18	520	11.4	722	4	US-09-198-052A-513	Sequence 513, App
19	503.5	11.1	823	4	US-09-252-991A-2476B	Sequence 2476B, A
20	266.5	5.9	559	3	US-09-542-610A-15	Sequence 15, Appli
21	266.5	5.9	559	4	US-09-298-324-6	Sequence 6, Appli
22	266.5	5.9	559	4	US-09-908-855-15	Sequence 15, Appli
23	266.5	5.9	648	4	US-09-552-991A-2462B	Sequence 2462B, A
24	245	5.4	893	4	US-09-514-302-4	Sequence 4, Appli
25	245	5.4	1938	4	US-09-514-302-2	Sequence 2, Appli
26	243.5	5.4	793	4	US-09-163-338-5	Sequence 5, Appli
27	232.5	5.1	606	3	US-09-187-124-2	Sequence 2, Appli

RESULT 2  
US-09-658-499-2  
Sequence 2, Application US/09658499  
; Patent No. 6669231  
; GENERAL INFORMATION:  
; APPLICANT: EK, Bo  
; APPLICANT: KHOSHODI, Jamshid  
; APPLICANT: LARSSON, Clas-Tomas  
; APPLICANT: RASK, Hakan  
; APPLICANT: RASK, Lars  
; TITLE OF INVENTION: STARCH BRANCHING ENZYME II OF POTATO  
FILE REFERENCE: 003300-486  
CURRENT APPLICATION NUMBER: US/09/658, 499  
CURRENT FILING DATE: 2000-09-08  
PRIOR APPLICATION NUMBER: 09/087,277  
PRIOR FILING DATE: 1998-05-29  
PRIOR APPLICATION NUMBER: PCT/SE96/01558  
PRIOR FILING DATE: 1996-11-28  
PRIOR FILING DATE: 1995-11-29  
PRIOR APPLICATION NUMBER: SE 9504272-7  
PRIOR FILING DATE: 1996-04-19  
NUMBER OF SEQ ID NOS: 4  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 2  
LENGTH: 878  
TYPE: PRT  
ORGANISM: Unknown

Qy 209 ATWAALIGDFNWNPNADWNTQNECGVWEFLPNNAADGSSPPIPHGSRVKIRMDTPSGNND 268 ; FEATURE:  
Db 243 AQSADIGDNWNDAADINTRNFGVWEFLPNVNGDSPAIPHSRVRKIRMDTPSGYRD 302 ; OTHER INFORMATION: Description of Unknown Organism:beII gene (branching enzyme II) f: ; OTHER INFORMATION: Solanum tuberosum (potato)  
US-09-658-499-2

Qy 269 SIPAWIKSYOQAPGELPYNGTYDPEECKVFKNPQRKPKSRLRIYBESHVGMSSTEPVYI 328 ;  
Db 303 SIPAWINSYOLPDETPYNGTYDPEECKVFKPRPKPSRLRIYBESHVGMSSPEPKI 362 ;  
Matches 621; Conservative 92; Mismatches 116; Indels 35; Gaps 5;  
Qy 329 NTYANERDVLPRIKLGLVQMAIQHNSYYASFCYHTNFEYASSRGTPDLSKSI 388 ;  
Db 363 NSYVNRDEVLPRIKLGLVQMAIQHNSYYASFCYHTNFXKAPSSEFGXPDLKSKI 422 ;  
Qy 389 DKAHEGLVLIMDIVHSHASTNTLGLNMFDGTGSHYFHSGRGHMWDLSRLENYGSKIE 448 ;  
Db 423 DKAHETGLVLIMDIVHSHASTNTLGLNMFDGTGSHYFHSGRGHMWDLSRLENYGSKIE 482 ;  
Db 449 VLRFLLSNARWLDEYKFDFGRFRDGTYTSMYTHHQLQVDTGNTNEYFEGATDVAVYL 508 ;  
Db 483 VLRFLLSNARWLDEKFDFGRFRDGTYTSMYTHHQLSVEFGLATDVAVYL 542 ;  
Qy 509 MLLNDMTHGLFPEAATGIDYSGMTVCIPVEDSGVGFYRHLMAVADKWKVLEIQQKRED 568 ;  
Db 543 MLVNDLJHGFLPDAITIGEDYSGMPTRXPVQDGEVGFDYRHLMAIAADMWIELKKRDED 602 ;  
Qy 569 WKMGDIVHMLTNRWRLEKCTSYAESHQALVGDKTIAFWLMDKMDYMDNALDRSTPLID 628 ;  
Db 603 WRVGDIVHMLTNRWRSEKCTSYAESHQALVGDKTIAFWLMDKMDYMDNALDRSTPLID 662 ;  
Qy 629 RGVALHKMRILUTMGJLGGEGLYNFGCNEFGHPWIDFPRGDHLPLSPCKVPGNNYSYDRC 688 ;  
Db 663 RGIAHKMRILUTMGJLGGEGLYNFGCNEFGHPWIDFPRAEQHLSGTSVTPGNOFSYDRC 722 ;  
Qy 689 RRFDLGNKSYHGLYHMQEFDQIAQHLEAYGEMTSEHQYLSRKDERDILIVFGRNLWF 748 ;  
Db 723 RRRFDLGAETLYRGQLEQFRAMOYLEDKYEFTMSEHQFISRKDEGDMIVFGRNLWF 782 ;  
Qy 749 VNFNFTSYSDYRVCGLKPKSYKVKYLDSDDPPLFEGFGRISHDAEHFSFEGWYDNPREF 808 ;  
Db 783 VNFNFTSYSDYRVCGLKPKSYKVKYLDSDDPPLFEGFGRISHDAEHFSFEGWYDNPREF 842 ;  
Qy 809 MVYTPCRTAVYALVEDEVENBLE 832 ;  
Db 843 MVYAPSRATAVYALVDKEEEEEE 866 ;

RESULT 2  
US-09-658-499-2  
Sequence 2, Application US/09658499  
; Patent No. 6669231  
; GENERAL INFORMATION:  
; APPLICANT: EK, Bo  
; APPLICANT: KHOSHODI, Jamshid  
; APPLICANT: LARSSON, Clas-Tomas  
; APPLICANT: RASK, Hakan  
; APPLICANT: RASK, Lars  
; TITLE OF INVENTION: STARCH BRANCHING ENZYME II OF POTATO  
FILE REFERENCE: 003300-486  
CURRENT APPLICATION NUMBER: US/09/658, 499  
CURRENT FILING DATE: 2000-09-08  
PRIOR APPLICATION NUMBER: 09/087,277  
PRIOR FILING DATE: 1998-05-29  
PRIOR APPLICATION NUMBER: PCT/SE96/01558  
PRIOR FILING DATE: 1996-11-28  
PRIOR FILING DATE: 1995-11-29  
PRIOR APPLICATION NUMBER: SE 9504272-7  
PRIOR FILING DATE: 1996-04-19  
NUMBER OF SEQ ID NOS: 4  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 2  
LENGTH: 878  
TYPE: PRT  
ORGANISM: Unknown

Qy 4 YTTSGIRPFCAP-LCKS0STGFHYRTSSCLSFNFKEAFSRVFGKSSHESSDSNVMM 62 ;  
Db 3 YTLSGVRFPTPSVYKSNQGFSNGDRNANKSYFLKHSRKLAKRSYNSERSPSTV 62 ;  
Qy 63 TASKRVL-PDGRIECYSSSTDQLEAPGTVSESVQVLTDESPLIMD---KLVDEV--- 114 ;  
Db 63 AASRKVL-PGQTQDSSSSSTDQEFTETSPENSASTDVSSTMEHARQIKTENDVEPS 122 ;  
Qy 115 -----NKESVYPMRETVSIRKIGS----- 148 ;  
Db 123 SDLTGSVBEFLDFASSLQLQEGGKLEESKTLNTSBETTIDESDRIRERGIPPPGQJKYB 182 ;  
Qy 149 IDEPLTGPRQHLDYRQSYQKRLLREEIDKYEGLSDFASRGYERKEFGFSESETGITYREWAPG 208 ;  
Db 183 IDPLTNTQRQHLDYRQSYQKYLREIDKYEGLGGLAEASRGYERKGFTRSATGITYREWAPG 242 ;  
Qy 209 ATWAALIGDFFNNWPNAVDMTONECQGWEIFLPNADSPPIPHGSRYVKIRMDTPSGNND 268 ;  
Db 243 AQSLALIGDFFNNWDANADIMTRNEFGWTEIFLPNNVGDSPAPIPHGSRYVKIRMDTPSGYKD 302 ;  
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Db 303 SIPAWINSLQLPDPYNGTYDPEECKVFKNPQPKRPSLRLIYESHVGMSPEPKI 362 ;  
Qy 329 NTYANERDVLPRIKLGLVQMAIQHNSYYASFCYHTNFEYASFRGTFDDLSKSI 388 ;  
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Qy 389 DKAHETGLVLIMDIVHSHASTNTLGLAMFDGTGHYFHSGRGHMWDLSRLENYGSKIE 448 ;  
Db 423 DKAHETGLVLIMDIVHSHASTNTLGLAMFDGTGHYFHSGRGHMWDLSRLENYGSKIE 482 ;  
Qy 449 VLRFPLSNARWLDEKFDFGRFDGVTSMYTHGLQVDFGTGNYNEFYGYATDVAVYL 508 ;  
Db 483 VLRFPLSNARWLDEKFDFGRFDGVTSMYTHGLSVEGFTGNYEYFGLATDVAVYL 542 ;  
Qy 509 MLINDMTHGLFPEAATGIDYSGMTVCIPVEDSGVGFYRHLMAVADKWKVLEIQQKRED 568 ;  
Db 543 MLVNDLJHGFLPDAITIGEDYSGMPTRXPVQDGEVGFDYRHLMAIAADMWIELKKRDED 602 ;  
Qy 569 WRMGDIVMLTNRWRLEKCVSYAESHDQALVGDKTIAFWLMDKMDYDFMALDRSTPLID 628 ;  
Db 603 WRVGDIVHMLTNRWRSEKCTSYAESHQALVGDKTIAFWLMDKMDYDFMALDRXSTSID 662 ;  
Qy 629 RGVALHKMRILUTMGJLGGEGLYNFGCNEFGHPWIDFPRAEQHLSGTSVTPGNOFSYDRC 688 ;  
Db 663 RGIAHKMRILUTMGJLGGEGLYNFGCNEFGHPWIDFPRAEQHLSGTSVTPGNOFSYDRC 722 ;  
Qy 689 RRFDLGNKSYHGLYHMQEFDQIAQHLEAYGEMTSEHQYLSRKDERDILIVFGRNLWF 748 ;  
Db 723 RRRFDLGAETLYRGQLEQFRAMOYLEDKYEFTMSEHQFISRKDEGDMIVFGRNLWF 782 ;  
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Db 783 VENFHWTSSYSDYRVCGLKPKSYKVKYLDSDDPPLFEGFGRISHDAEHFSFEGWYDNPREF 842 ;  
Qy 809 MVTTPCRTAVYALVEDEVENBLE 832 ;  
Db 843 MVYAPSRATAVYALVDKEEEEEE 866 ;

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; Patent No. 66319126
; GENERAL INFORMATION:
; APPLICANT: Sewall, Vincent J. H.
; APPLICANT: Singletary, George W.
; TITLE OF INVENTION: Production of Modified Polysaccharides
; FILE REFERENCE: 35718/206348
; CURRENT APPLICATION NUMBER: US/09/731,166
; CURRENT FILING DATE: 2000-12-06
; PRIOR APPLICATION NUMBER: 60/169,993
; PRIOR FILING DATE: 1999-12-06
; NUMBER OF SEQ ID NOS: 16
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 10
; LENGTH: 814
; TYPE: PRT
; ORGANISM: zea mays
US-09-731-16-10

Query Match          71.8%   Score 3261.5,  DB 4; Length: 814
Best Local Similarity 74.0%; Pred. No. 8.e-30;
Matches 604; Conservative 70; Mismatches 109; Indels 1
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Db          7  FRRKDASFRTVLSAGAGRKVLYPGGSSDLDLSSAEPVYDTPQPEBLQ

Qy          82  DQEAPGTVSSEPSQLTVESSLJIMDDKL-----VDEDEVNKKESVY
Qy          67  SPTQTSAVAEASSGVAAERPELSEVIGVGGTGGTKIDGA/GTAKAKA

Qy          133  KPRSIIPPGRGORIYDIDPSLTGCFRQHIDYRSQYKRREI/DKYEGG
Qy          119  KPRVIIPPQGDQRIYEIDPMLEDFGRHIDYRSVEYKRURRAATDQHEGGKA

Qy          193  FSRSETGTYREWAPGATAAALIGDFNNWNPNADVMTOONECGWEIFP
Qy          179  PTRSAQITYREWAPGAYSAALVGDFNNWNPNADAMNEYGWEIFP

Qy          253  GSRVKIRMDTPSGNKDSTPAWIKFSVQAPGELPYNGTYDPPEEEKYY
Qy          239  GSRVKIRMDTPSGVKDS.PAWIKFSVQAPGEIPYNGTYDPPEEEKYY

Qy          313  RIYESHGMSSPEPVINTYANPRDDVLERIKGYNAYNAVOLMA.QEHS
Qy          299  RIYESHGMSSPEPKINTYANPRDDVLERIKGYNAYNAVIMA.QEHS

Qy          373  AASSRGCTPDDLSKLDRKAHELGLLVMDIVHSHASTNLGJLMNPMD
Qy          359  APSSRGITGPEDIKSLDRKAHELGLLVMDIVHSHSSNTLGDINGFDD

Qy          433  HHWWMDSRFLNYGSWEVRLFLISNARWMLDEYKFDGFRFHDGTSMY
Qy          419  HHWWMDSRFLNYGSWEVRLFLISNARWLEETKFDGFRFHDGTSMY

Qy          553  AVADKNEVIIQRKDRDEWMGDIVHMLTNRWLEKCVSYAESHDOALVC
Qy          539  AVPDKW/ELLKQSDTEWMDGIVHMLTNRWLEKCVTCESHDALVC

Qy          613  MYDEMALDRPSTPLIDRGVALHKMIRLITMGLGEGCYLNFMGMNEFGH
Qy          599  MYDEMALDRPSPRIDCIALHKMIRLUTMGLGEGCYLNFMGMNEFGH

Qy          673  PSGKFVGGNNNTSYDKCERFRDGLNSKHRYHGQEFDAOIQLHLEAY
Qy          659  PNGSVIPGNNNSFDKCRRFEDLGDAIDYRGMQEFDAQMHLEGKYM

Qy          733  DERDRIVFERENLVFENHTWSSSYDRVGCLKPKGYKIVLDSDDD
Db          719  HEEDKVTFIFEREDLVLVFNFRNSYFVYRGCFKPGBKGYKIVLDSDDD

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Db	593	CRRFDFGDAEFLRLYIGMQEFDQAMOHLEKXYGMFTSEHQQVSRKHEDVKTIFERGLDV	652	Db	568	SHDQALYGDKTTAFLWMDKDMDFMALDRPSTPTIDRJALHMIRLITMGLGEBGYLN	627
Qy	748	FVNFWHTSFSYSDYRGCLKGCKYKVLDSDDPFLGGFGLSLSHDAEHSPFGWYDNPRPS	807	Qy	653	MGNBFGHPPEWIDPPRGDLHLPSCKFPGNNSYDKCRRRFOLGNSKHLRYHGMQBFQDQAI	712
Db	653	FVNFWNSFSFYRGCSCKYKVLDSDDALFCGSFSRSLDHDYFTSHPHDNPRPS	712	Db	628	MGNBFGHPPEWIDPPRGPKLPSCKFIPNNNSYDKCRRRFOLGDDAYLRYHGMQBFQDQAM	687
Qy	808	FMVYPTERTAVYALVE	824	Qy	713	QHLEEAYGFMTSSEHQYISRKDERDRIVFERGLVLVFENHMTSSYDVRGCLPGKVK	772
Db	713	FSVTFSRTAVYALTE	729	Db	688	QHLEQKQEFMITSDHQYISRKHEEDKVIYFEGDLVVFENFHNCNSYFDYRGRKPGVYK	747
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US-09-731-166-12							
; Sequence 12, Application US/09731166							
; GENERAL INFORMATION:							
;   APPLICANT: Seward, Vincent J. H.							
;   TITLE OF INVENTION: Production of Modified Polysaccharides							
;   FILE REFERENCE: 35718/206348							
;   CURRENT FILING DATE: 2000-12-06							
;   PRIOR APPLICATION NUMBER: 60/169,993							
;   PRIOR FILING DATE: 1999-12-06							
;   NUMBER OF SEQ ID NOS: 16							
;   SOFTWARE: FastSEQ for Windows Version 4.0							
;   SEQ ID NO: 12							
;   LENGTH: 799							
;   TYPE: PRT							
;   ORGANISM: Zea mays							
US-09-731-166-12							
Query Match 69.7%; Score 3169; DB 4; Length 799;							
Best Local Similarity 74.4%; Pred. No. 8.8e-100;							
Matches 574; Conservative 80; Mismatches 78; Indels 40; Gaps 5;							
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Qy	173	BIDKYEGLDAFSRGYTEKFGRSETCTYREWAPGATWAALIJGDFNNWNPNADWNTQE	232	Db	148	DIDEHEGCLAEFSRSVTEKFGFNRSAGCTYREWAPGAFSAALVGDFNNWDNADMKN	207
Qy	233	CGWWEFLPLNNADGSPPIPHGSRVKIRMDTPSGNKDOSIPAKTFSYOAPEGELPYNGTYD	292	Db	268	PBEEKTVFVRQNPQPKPSLRLYESTHYGMSSTEPVNTYANFRDVLPRIKLGYNQVL	352
Qy	208	FGWWEFLPLNNADGTSPIPHGSRVKIRMDTPSGKIDOSIPAKTFSYOAPEGEPYDGYD	267	Db	328	MAIQEHSYYASFGYHYTNFYAAASSRGTTPDLSLKSLLDAHELGLLVMDVVISHASNTL	412
Qy	353	MAIQEHSYYASFGYHYTNFYAAASSRGTTPDLSLKSLLDAHELGLLVMDVVISHASNTL	387	Db	413	DGLANMFDTGDTGHYFHSGPGRHHMMWDSRLNFYNGSWEVLFRLSNARWLDEYKFDGFRFD	472
Qy	388	DCLNGPDTGDTFHSGSPRHMMWDSRLNFYNGNWEVLFRLSNARWLDEYKFDGFRFD	447	Db	448	GVTSMYTHGLQVDTGFTGNYNEYFGYATDVAVVYMLLNDMIGLPEAVTGEDYGM	532
Qy	473	GVTSMYTHGLQVDTGFTGNYNEYFGYATDVAVVYMLLNDMIGLPEAVTGEDYGM	507	Db	533	PVCIPYEDGGYGFDTYRLHMAVADKWEI1QGRDEWMGD1VHMLTNRWLEKCVSYAE	592
Qy	533	PVCIPYEDGGYGFDTYRLHMAVADKWEI1QGRDEWMGD1VHMLTNRWLEKCVSYAE	567	Db	508	PTPALPVHDGGYGFDTYRLHMAVADKWLKLKOSDETMWGD1VHMLTNRWLEKCVYAE	567
Qy	593	SHDQALYGDKTTAFLWMDKDMDFMALDRPSTPTIDRJALHMIRLITMGLGEBGYLN	652	Db	107	113 EVNKESVPMRETVSIRKIGSKPSRSLPIPPGRCORYIDPSPLTGFROHLDYRSQYKRLE	172
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Matches 573; Conservative 79; Mismatches 80; Indexes 40; Gaps 5;							
Qy	64	ASKRVL-PDG-----RIECYSSSTDQLAEPTGVSEESQV--LTDVSELIMDDKIVED	112	Db	57	ARCAVMVPGENDOGLASRADSAQFSDELEV-DISBETTCAGVADAQAL-----	106
Qy	64	ASKRVL-PDG-----RIECYSSSTDQLAEPTGVSEESQV--LTDVSELIMDDKIVED	112	Db	113	EVNKESVPMRETVSIRKIGSKPSRSLPIPPGRCORYIDPSPLTGFROHLDYRSQYKRLE	172
Qy	64	ASKRVL-PDG-----RIECYSSSTDQLAEPTGVSEESQV--LTDVSELIMDDKIVED	112	Db	107	NRVRYVPPPSDGKQFKQFDPMQLQKYKTHLEYRSYLYRIRS	147
Qy	173	EIDKREGSLDAFSRGYERFGFSRSETGTITYREWAPGATWAALIGDNNWNPNADMTNE	232	Db	173	SHDQALYGDKTTAFLWMDKDMDFMALDRPSTPTIDRJALHMIRLITMGLGEBGYLN	652

Db	148 DIDEHEGGLEAFSRSYEKPGFNAASAEKITTYREWAPGAFSAALVGDVNNWDNADMSKNE	207	Query Match 48 5%; Score 2204; DB 3; Length 464;
Qy	233 CGYWEIPLPNADGSPPPHGSRVKIRMDTPSGNKDSIPAWIKFSYOAPGELPYNGIYD	292	Best Local Similarity 84 0%; Pred. No. 5e-06; Matches 389; Conservative 40; Mis matches 34; Indels 0; Gaps 0;
Db	208 FGWEIPLPNADGSPPHGSRVKIRMDTPSGIKOSIPAWIKSYOAPGELPYNGIYD	267	Qy 240 LPNNADGSPPHGSRVKIRMDTPSGNKDSIPAWIKFSYOAPGELPYNGIYDPEEKEY 299
Qy	293 PPEEEKYVKNQPKRKPSLRLIYESHVGMSSTEPVINTYANFRDDYLPRIKKLGYNAVQL	352	Db 1 LPNNADGSPPHGSRVKIRMDTPSGVKSIPAWINSLQLPDEPYNGIYDPEEKEY 60
Db	268 PBEVKVCFRBLAQPKRKPSLRLIYESHVGMSSTEPVINTYANFRDEVTLPRIKKLGYNAVQI	327	Qy 300 VPKNQPKRKPSLRLIYESHVGMSSTEPVINTYANFRDDYLPRIKKLGYNAVOLMAJOEHS 359
Qy	353 MAIQEHSYIASFGHYTINYAASSRGFTPDDIKSLIDKAHLGLLVMDIVHSHASTNTL	412	Db 61 IFQHPRPKRKPSLRLIYESHIGMSSEPKNSYVNRDEVTLPRIKKLGYNAVQIQAQHS 120
Db	328 MAIQEHSYGSFGHYTNNFPASSRFCTPEDIKSLIDRAHGLLVMDIVHSHASNTL	387	Qy 360 YYASFGHYTINYAASSRGFTPDDIKSLIDKAHLGLLVMDIVHSHASTNTLGLDNMFD 419
Qy	413 DLGNMFQDTGHTFHSGRGRGHMMWDSRFLPNYGSWEVLRFULSNAWRWLDKEDFGFRD	472	Db 121 YYASFGHYTINYXASSRFXPDKSLIDKAHLGLLVMDIVHSHASTNTLGLDNMFD 180
Db	388 DLNLNGFQDTDTHFSSPRGHMMWDSRFLPNYGNWEVLRFULSNAWRWLEKFDFGRD	447	Qy 420 GTDGHyFHSGPRGHMMWDSRFLPNYGSWEVLRFULSNAWRWLEKFDFGRDGTSMY 479
Qy	473 GTTSMYTHHGLQVDFGTGTYNEYFGYATDVAVVYMLNDMTHGLFPEAVTIGEDVSQM	532	Db 181 GTDSCSFHSGARGYHMMWDSRFLPNYGNWEVLRFULSNAWRWLEKFDFGRDGTSMY 240
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Qy	533 PTVC1PYEDGGYGFYDYLHMAYADKTVTEIIQKRDDEWKMDIVVMLTRNRMLEKCYSAE	592	Db 241 THHGISVGFGTGNYEEYFGLATDVAVVYMLNDMTHGLFPEAVTIGEDVSQMPTCIPV 300
Db	508 PTFLALPYHDGGYGFYDTRMHMAYADKTVTEIIQKRDDEWKMDIVVMLTRNRMLEKCYSAE	567	Qy 540 BDKTIATFWLMKDQMYDEMALDRPSTPLIDRVAHJMIRLITMGLGEGGYLNFGH 659
Qy	593 SHDQALVGDKTIAFWLMKDQMYDEMALDRPSTPLIDRVAHJMIRLITMGLGEGGYLNFGH 652	Db 301 QDGGYGFDTRLHMAIDKTVTEIIQKRDDEWRVGDTVHLTINRROSEKCVSYAESHDQALV 360	
Db	568 SHDQALVGDKTIAFWLMKDQMYDEMALDRPSTPLIDRVAHJMIRLITMGLGEGGYLNFGH 627	Qy 600 GDKTIATFWLMKDQMYDEMALDRPSTPLIDRVAHJMIRLITMGLGEGGYLNFGH 659	
Qy	653 MGNEFGHPGEWIDPRGDHLPSGKFVPGNNSYDKCRRFGLGNSKHLRYHGMOEFDOI	712	Db 361 GDKTIATFWLMKDQMYDEMALDRXSTSLIDRGAJAHJMIRLVTMGLGEGGYLNFGH 420
Db	628 MGNEFGHPGEWIDPRQRLPSGKFVPGNNNSYDKCRRFGLGDAJLYHGMQEDQAM	687	Qy 660 PEWIDPFRGDHLHPSGKFVPGNNSYDKCRRFGLGNSKHLRY 702
Qy	713 QHLEEAYGFMTEHQYTSRKDERDRITFVERGNLVEVFNFHWTSSYSDYRGCLKPGKK	772	Db 421 PEWIDPRAEQHLSIDGSVPGNNSYDKCRRFGLGDAEYLRY 463
Db	688 QHLEEAYGFMTEHQYTSRKDERDRITFVERGNLVEVFNFHWTSSYSDYRGCLKPGKK	747	RESULT 8
Qy	773 IVLDDDPPLFGGGFGRSLDAEFSFGEWDRPRSPMVYTPCRTAVVYALVE	824	US-09-658-499-4
Db	748 VVLDSDAGLFGGGFSRIRHAAEHTADCSHDNRPYSFSVYTFPSRTCVVYAPV	799	Sequence 4, Application US/09658499
<b>RESULT 7</b>			
Sequence 4, Application US/09087277B			
; GENERAL INFORMATION:			
; APPLICANT: EK, Bo			
; APPLICANT: KHOSNOODI, Jamshid			
; APPLICANT: LARSSON, Clas-Tomas			
; APPLICANT: LARSSON, Hakan			
; TITLE OF INVENTION: STARCH BRANCHING ENZYME II OF POTATO			
; FILE REFERENCE: 003300-416			
; CURRENT APPLICATION NUMBER: US/09/658,499			
; PRIORITY NUMBER: 003300-416			
; CURRENT FILING DATE: 1998-05-29			
; EARLIER APPLICATION NUMBER: PCT/SE96/01558			
; EARLIER FILING DATE: 1996-05-29			
; EARLIER APPLICATION NUMBER: SE 9601506-0			
; EARLIER FILING DATE: 1996-04-19			
; NUMBER OF SEQ ID NOS: 4			
; SOFTWARE: PatentIn Ver. 2.0			
; SEQ ID NO: 4			
; LENGTH: 464			
; TYPE: PRT			
; ORGANISM: Unknown			
; FEATURE:			
; OTHER INFORMATION: Description of Unknown Organism:bell gene fragment (branching enz)			
; OTHER INFORMATION: Description of Solanum tuberosum (potato)			
US-09-658-499-4			

95 ENIG-----LLNLDPTLEPYLDHFRHRMKRYVDOKMLIEKYEGPLEEFQG 140

Qy 240 LPNNADGSPPIPHGSRKVKIRMDTPSGNKDSITPAWIKFSSYQAPGELPNNGTYDPEEEFY 299

- Db 1 LPNNADGSPPIPHGSRKVKIRMDTPSGNKDSITPAWIKFSSYQAPGELPNNGTYDPEEEFY 60

Db 188 YEKFGFSRSETGITYREWAPGATWAALGDENNNWNPNADMTONECGYWEIFLPNNADGS 247

Db 141 YLKFGFNREDGCKTVERAPAAQAEVGFNGNSHMMEDQFGWSIRIP-DVDSK 199

Qy 300 VFKNPQPKPKPSLRLTYESHVGMSSTERPVINTYANPRDDVLPIRKLGYNQVALMAIQEHS 359

Db 61 IFQHPKPXPKPSLRLTYESHVGMSSTERPVINTYANPRDDVLPIRKLGYNQVALMAIQEHS 120

Db 248 PPIPHGSRKVKIRMDTPSGN-KOSIPAWIKFSSYQAPGEL-PYNGIYDPPPEEEFYVKNP 304

Qy 360 YASFGYHVNTFYAASSRFGTPDDKLKSLSLKAHEGLLVMIDIVSHASINTLGLANNED 419

Db 121 YYASFGYHVNTFXAPSSRFEXPDDKLKSLSLKAHEGLLVMIDIVSHASINTLGLANNED 180

Db 200 PVLPNSRVTKEPKHGNGSYWDRPAWKVYATADATKEAAPYDGVYDPPPSRYPKYP 259

Qy 305 QPKPSLRLTYESHVGMSSTEPVINTYANPRDDVLPIRKLGYNQVALMAIQEHS 364

Db 260 RPPRPARPIYEAVHGMSSSEPRVNSYREFADDVLPIRKANNNTVQLMAINEHYSYGSF 319

Qy 420 GTDGHYFHSGPRGHMWMWSRLNFNYGSWEYLRLFLISNARWLMDEYKFDFGRFRDGTSMMY 479

Db 181 GTDSCYFHSGARGHMHWMWSRLFNGWNLVYLSNARWLMDEYKFDFGRFRDGTSMMY 240

Db 320 GHYHTNPFPAVSSRGNPBLLKYLTDKAISLGLOVLVDVHSHASNNVTGLNGFDIGQGS 379

Qy 480 THHGLQYDFTGNYNEYFGYATTDVAVYLMLNNDMTHGLPPEAVTIGEDVSQMPTEVCTEVY 539

Db 241 THHGLSVGFTGNYEEYFGLATDVAVYLMVNLDLHGFPAITAIGEDVSQMPTEVXIV 300

Db 360 QESTPHAGPRGRTKWLWDRSLFNTANWETYLRLFLISNARWLMDEYKFDFGRFRDGTSMMY 439

Qy 540 EDGGVCFDYRLHMAVADKWTBIIQQRDEWDKMGDVFHMLINTRRLEKCTSYAESHDOALY 599

Db 301 QDGGVCFDYRLHMAVADKWTBIIQQRDEWDKMGDVFHMLINTRRLEKCTSYAESHDOALY 360

Db 440 HGTMNGFCGNYNEYFSEATDVAVYLMLANLILHKFLFPDATVIAEDYSGMPGJGPYSE 499

Qy 600 GDKTIAFWLMDKDMYDIMALDRPSTPLIDRSLRVALKMRJLTMGJGGBGYLNFMQNEFGRH 659

Db 361 GDKTIAFWLMDKDMYDIMALDRPSTPLIDRSLRVALKMRJLTMGJGGBGYLNFMQNEFGRH 420

Db 500 GGIGFVYRLAMAIPDKWIDYLKNGNDWMSKEVTTSSLTINRRTYTEKCVSYAESHDOALY 559

Qy 660 PEWIDPFRGDHLPSKGFKVPGNNYSYDKCRRRFDLGNSKHLRY 702

Db 421 PEWIDPFRAEOHLSDGSVIPSQFSYDKCRRRFDLGDAEFLRY 463

Db 560 DKTIAFWLMDKEMYSGMSCLTDASPVVDRGIALHMTHFFTMALGEGGYLNFMQNEFGRH 660

Db 619 EWIIDPFRGDHLPSKGFKVPGNNYSYDKCRRRFDLGNSKHLRYHGMQEDQAIQHLEAYG 720

Qy 620 EWIIDPFR-----EGNNWSYDKCRONNLADSBHLRZKFMNAFDRAINSLDERKPS 668

Db 721 FMTSBHQYTSRKODERDRLLIVFERNLVEFNFWTFWTSYSDYRVGCLKGKGYKIVLSDDP 780

Qy 722 FLAGKQIVSSMDDDNKVVFERGDLVFNFPKNTVEGYRGCDLPKGKYVALDSAW 728

Db 729 EFGGGFGRGLSHDAEHFSF-----EGWYDNRPRSFMYTPCRTAVAYALVED---- 825

Qy 781 LFGGGFGRGLSHDAEHFSF-----EGWYDNRPRSFMYTPCRTAVAYALVED---- 825

Db 782 FMTSBHQYTSRKODERDRLLIVFERNLVEFNFWTFWTSYSDYRVGCLKGKGYKIVLSDDP 788

Qy 826 --EVENELEPVA 835

Db 789 YQTDICSELUPTA 801

RESULT 10

US-09-367-895-41 US-08-941-445A-17

; Sequence 41, Application US/09367895 ; Sequence 41, Application US/08941445A

; Patent No. 6483009 ; Patent No. 6107060

; GENERAL INFORMATION: ; GENERAL INFORMATION:

; APPLICANT: POULSEN, PETER ; APPLICANT: Guan, Hanping

; TITLE OF INVENTION: ANTISENSE INTRON INHIBITION OF STARCH BRANCHING ENZYME ; TITLE OF INVENTION: Expression

; FILE REFERENCE: 078893/0112 ; FILE REFERENCE: 078893/0112

; CURRENT FILING DATE: 1999-12-08 ; CURRENT FILING DATE: 1999-12-08

; PRIOR APPLICATION NUMBER: PCT/IB98/00270 ; PRIOR APPLICATION NUMBER: PCT/IB98/00270

; PRIOR FILING DATE: 1998-02-13 ; PRIOR FILING DATE: 1998-02-13

; PRIOR APPLICATION NUMBER: GB/9703663 . 6 ; PRIOR APPLICATION NUMBER: GB/9703663 . 6

; PRIOR FILING DATE: 1997-02-21 ; PRIOR FILING DATE: 1997-02-21

; PRIOR APPLICATION NUMBER: GB/9706060 . 2 ; PRIOR APPLICATION NUMBER: GB/9706060 . 2

; PRIOR FILING DATE: 1997-03-24 ; PRIOR FILING DATE: 1997-03-24

; NUMBER OF SEQ ID NOS: 43 ; NUMBER OF SEQ ID NOS: 43

; SOFTWARE: PatentIn Ver. 2.1 ; SOFTWARE: PatentIn Ver. 2.1

; SEQ ID NO 41 ; SEQ ID NO 41

; LENGTH: 906 ; LENGTH: 906

; TYPE: PRT ; TYPE: PRT

; ORGANISM: Solanum tuberosum ; ORGANISM: Solanum tuberosum

US-09-367-895-41

Query Match 48.2%; Score 2192.5; Length 906;

Best Local Similarity 50.2%; Pred. No. 2.1e-204; Mismatches 125; Indels 103; Gaps 15;

Matches 428; Conservative 125; Mismatches 197; Indels 103; Gaps 15;

Qy 34 LSFNFK-----EAFTSRVFSOCKSH-----ESDNVNMVATCSR 67

Db 1 MBINFKVYLSKPKJRGSPFSPSKPSVSEASRNKICCPFSQHGSTLKFQSERSWDISTPSKR 60

Qy 68 VLPDGRLCYSSSTDQLEAPGTVSEESQVLTDVESIIMMDKIVEDEVNKESVPNRETVSI 127

Db 61 VRKDERMK-HSSAI-----SAVLT-----NSTMAPLEBEDVCT 94

Qy 128 RKIGSKPRSIIPPGRGORIYDPSLTGFROLDTRYSSQYKRLREPIDKREGSLDASRG 187

Db 128 RKGSKPRSIIPPGRGORIYDPSLTGFROLDTRYSSQYKRLREPIDKREGSLDASRG 187

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/941,445A  
 FILING DATE: 30-SEP-1997  
 CLASSIFICATION: 800  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: US 6/026,855  
 FILING DATE: 30-SEP-1996  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Winner, Ellen P.  
 REGISTRATION NUMBER: 28, 547  
 REFERENCE DOCKET NUMBER: 89-97  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: (303) 499-8080  
 TELEFAX: (303) 499-8089  
 INFORMATION FOR SEQ ID NO: 17:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 822 amino acids  
 TYPE: amino acid  
 TOPOLOGY: linear  
 MOLECULE TYPE: protein  
 US-08-941-445A-17

Query Match 46.7%: Score 2124; DB 3; Length 822;  
 Best Local Similarity 56.1%; Pred. No. 8.6e-198;  
 Matches 389; Conservative 112; Mismatches 167; Indels 26; Gaps 6;

Qy 146 TYDIDPSLTGFRQHLDYRYSQYKVLRLREEDKYGESLDAFSRGYEKGFSRSETGTYREW 205  
 Db 84 TYDLPKLEIFDHFYRMKRKFLEQKGSIIEENEGSLESFSKGYLFGINTNEDGTYREW 143  
 Qy 206 AFGATWALIGDFNNNPNADDMTQNECGWEIFLPNNAODSPPIPHGSRVKIRMDTPSG 265  
 Db 144 APAQEAELIGDFNDNGANHMKERDKFGWWSIKI-DHVCKKPAPHNSKVFKRFLHGGV 202  
 Db 266 NKDSIPAWIKPSVQAPGEL - PYNGIYYDPPEEEKVFVNPOPQPKSLRUYESHVGMSS 323  
 Db 203 WVDRIPLARITVDAFSKGAYDHWDPPASERTFHKRPSKPAAPPIYAHTVGMSG 262  
 Qy 324 TEPVINTYANFRDDVLPRIKLGYNQAVLQMAIQEHSYYASGTYNTNFYAAASSRGTDD 383  
 Db 263 EKPAVSTYREFADNVLPRIRANNYNTVQLMAMHEHSYYASGTYNTNFYAAASSRGTDD 322  
 Qy 384 LKSLIDKAHEHLGLVLMIDVSHASTNTLGLMFD -- -GTDGHYFHSGPGRHHMWDSR 440  
 Db 323 LKLYLVDAKHSGLRVLMDVVSASHASNNVTDLINGDVQSTQESTYHAQDRGYHKLWDSR 382  
 Db 441 LFNYGSWEVLRFLLSNARWLDEKFQDGFRFDGTTSMYTHGLQVDFTGTYNEFGYAT 500  
 Db 383 LFNYAWWEVLRFLLSNRYWDEFMDGFREDGTSMLYHHHGTINGFTNYQEXFSLDT 442  
 Qy 501 DVDAVYMLMLANDMINGLFPRAVITGEDVSGMPTCIPVDEGGVGFDRYLEMAYADKWE 560  
 Db 443 AVDAVYMMMLANHMLMKLPLEATVVAEDVSCMPVLCRPTDEGGVGFDRYLAMALPDRWID 502  
 Qy 561 IIQKRD-E-DWKGHDIVHMLTRWRLEKCVSYAESHDOAQLWDGKTLIAFWMLDKOMYDFMAL 619  
 Db 503 YLNKNDSEWSMGSEIAHTLNRRTYECTIAYAESHDQSIVGDKTIAFLMDKEMYTGMSD 562  
 Qy 620 DRPSTPLIDRGVALHMKRILTMUGGEGYLNFMGNEFGHPWIDPFGDLDLHLPGKFPV 679  
 Db 563 LQASPPTIDRGIALQRMHFTMAGDGYLNFMGNEFGHPWIDPFR-----E 611  
 Qy 680 GNNYSYDKCRRFDLGNSKHLYRHMQEFOIAQHLEAAGFMISEHQYTSRKDERDRII 739  
 Db 612 GNNWSYDKCRQSLVDTDLHRYKTMNAQMDAMALDEREFFLSSSKQIVSDMNEEKYI 671  
 Qy 740 VFERGNIUVFENPHTSSYSDYRGCLPKGYKIVLDDPFFGGFGRSLHDAEHSF-- 797  
 Db 672 VFERGDLVFNHFHKPKTXYEGVKVGDLPKGYRVALSDALVFGHGRVGDVHDHTFSP 731  
 Qy 798 -----EGWYDNRPRSEMVTPCRTAVYVALVED 825  
 Db 732 GVPGVPTENFNRRNPSEKVLSPRTCVAYYRVDE 765

Query Match 46.7%: Score 2124; DB 4; Length 822;  
 Best Local Similarity 56.1%; Pred. No. 8.6e-198;  
 Matches 389; Conservative 112; Mismatches 167; Indels 26; Gaps 6;

Qy 146 TYDIDPSLTGFRQHLDYRYSQYKVLRLREEDKYGESLDAFSRGYEKGFSRSETGTYREW 205  
 Db 84 TYDLPKLEIFDHFYRMKRKFLEQKGSIIEENEGSLESFSKGYLFGINTNEDGTYREW 143  
 Qy 206 AFGATWALIGDFNNNPNADDMTQNECGWEIFLPNNAODSPPIPHGSRVKIRMDTPSG 265  
 Db 144 APAQEAELIGDFNDNGANHMKERDKFGWWSIKI-DHVCKKPAPHNSKVFKRFLHGGV 202  
 Db 266 NKDSIPAWIKPSVQAPGEL - PYNGIYYDPPEEEKVFVNPOPQPKSLRUYESHVGMSS 323  
 Db 203 WVDRIPLARITVDAFSKGAYDHWDPPASERTFHKRPSKPAAPPIYAHTVGMSG 262  
 Qy 324 TEPVINTYANFRDDVLPRIKLGYNQAVLQMAIQEHSYYASGTYNTNFYAAASSRGTDD 383  
 Db 263 EKPAVSTYREFADNVLPRIRANNYNTVQLMAMHEHSYYASGTYNTNFYAAASSRGTDD 322  
 Qy 384 LKSLIDKAHEHLGLVLMIDVSHASTNTLGLMFD -- -GTDGHYFHSGPGRHHMWDSR 440  
 Db 323 LKLYLVDAKHSGLRVLMDVVSASHASNNVTDLINGDVQSTQESTYHAQDRGYHKLWDSR 382  
 Qy 441 LFNYGSWEVLRFLLSNARWLDEKFQDGFRFDGTTSMYTHGLQVDFTGTYNEFGYAT 500  
 Db 383 LFNYAWWEVLRFLLSNRYWDEFMDGFREDGTSMLYHHHGTINGFTNYQEXFSLDT 442  
 Qy 501 DVDAVYMLMLANDMINGLFPRAVITGEDVSGMPTCIPVDEGGVGFDRYLEMAYADKWE 560  
 Db 443 AVDAVYMMMLANHMLMKLPLEATVVAEDVSCMPVLCRPTDEGGVGFDRYLAMALPDRWID 502  
 Qy 561 IIQKRD-E-DWKGHDIVHMLTRWRLEKCVSYAESHDOAQLWDGKTLIAFWMLDKOMYDFMAL 619  
 Db 503 YLNKNDSEWSMGSEIAHTLNRRTYECTIAYAESHDQSIVGDKTIAFLMDKEMYTGMSD 562  
 Qy 620 DRPSTPLIDRGVALHMKRILTMUGGEGYLNFMGNEFGHPWIDPFGDLDLHLPGKFPV 679  
 Db 563 LQASPPTIDRGIALQRMHFTMAGDGYLNFMGNEFGHPWIDPFR-----E 611  
 Qy 680 GNNYSYDKCRRFDLGNSKHLYRHMQEFOIAQHLEAAGFMISEHQYTSRKDERDRII 739  
 Db 612 GNNWSYDKCRQSLVDTDLHRYKTMNAQMDAMALDEREFFLSSSKQIVSDMNEEKYI 671  
 Qy 740 VFERGNIUVFENPHTSSYSDYRGCLPKGYKIVLDDPFFGGFGRSLHDAEHSF-- 797  
 Db 672 VFERGDLVFNHFHKPKTXYEGVKVGDLPKGYRVALSDALVFGHGRVGDVHDHTFSP 731  
 Qy 798 -----EGWYDNRPRSEMVTPCRTAVYVALVED 825  
 Db 732 GVPGVPTENFNRRNPSEKVLSPRTCVAYYRVDE 765

RESULT 12  
 US-08-104-158-2  
 Sequence 2, Application US/08104158  
 Patent No. 6215042  
 GENERAL INFORMATION:  
 APPLICANT: Willmitzer, Lothar  
 APPLICANT: Sonnewald, Uwe  
 APPLICANT: Kossmann, Jens  
 APPLICANT: Mueller-Roeber, Bernd  
 APPLICANT: Visser, Richard Gerardus Franciscus  
 APPLICANT: Jacobson, Evert  
 TITLE OF INVENTION: CAUSE CHANGES IN THE CARBOHYDRATE CONCENTRATION AND THE CARBOHYDRATE COMPOSITION IN PLANTS, AS WELL AS PLANT CELLS  
 TITLE OF INVENTION: CARBOHYDRATE COMPOSITION IN PLANTS, AS WELL AS PLANT CELLS  
 NUMBER OF SEQUENCES: 2  
 CORRESPONDENCE ADDRESS:  
 STREET: Ostrrolek, Faber, Gerb & soffen  
 CITY: 1180 Avenue of the Americas  
 CITY: New York  
 STATE: New York  
 COUNTRY: U.S.A.  
 ZIP: 10036-8403  
 COMPUTER READABLE FORM:  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: Patent in Release #1.0, Version #1.25  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/08/104,158  
 FILING DATE: 13-AUG-1993  
 CLASSIFICATION: 800  
 PRIORITY APPLICATION DATA:  
 APPLICATION NUMBER: EP PCT/EP92/00302  
 FILING DATE: 11-FEB-1992  
 PRIOR APPLICATION DATA:  
 APPLICATION NUMBER: DE P 41 04 782.6  
 FILING DATE: 13-FEB-1991  
 ATTORNEY/AGENT INFORMATION:  
 NAME: Meilman, Edward A.  
 REGISTRATION NUMBER: 24,735  
 REFERENCE/DOCKET NUMBER: FA-1996 PCT (951-91)  
 TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 212-382-0700  
 TELEX: 236925  
 INFORMATION FOR SEQ ID NO: 2:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 566 amino acids  
 TYPE: amino acid  
 MOLECULE TYPE: protein  
 US-08-104-158-2

Query Match Score 1635.5; DB 3; Length 566;  
 Best Local Similarity 52.2%; Pred. No. 2.1e-150; Indels 49; Gaps 9;  
 Matches 316; Conservative 89; MisMatches 151;

Qy 57 SSNVMTASKVLPDGRIBCYSSSTPQLLEAPGTVSEESQVLTDVESLIMDDKIVDEVNK 116  
 Db 4 SWDISSTPKSVRKDERMK-HSSAI-----SAVLTD-----DNS 36  
 Qy 117 ESVPMPRETYSIRKIGSKPRSIPPPGRQRQIYDIDPSLTGFRQHLDYRSQYKRLREEDK 176  
 Db 37 TMAPLEDNTENIG-----LNLNDPLTLEPYLDHFRMRMRYVDQMLIEK 82  
 Qy 177 YEGSLDAFSRSGYEKFGFSTSSETGTITYREWAGTWAALIGDENNNPNADMTQNECGW 236  
 Db 83 YEGPBLERFAQGYLKFGFNREDGCCIVREWAAQAEQEVGDFNRGNSNMMERDQFGTW 142  
 Qy 237 EIFLPNNADGSPPFPHGSVVKIRMDTPSGN-KDSIPIAVTKFSVQAPGEL--PYNGIYDP 293  
 Db 143 SIRIP-DVDSKPVIPHGSRVKIRMDTPSGN-KDSIPIAWIKPSVQAPGEL--PYNGIYDP 201  
 Qy

Db 143 SIRIP-DVDSKPVIPHGSRVKIRMDTPSGN-KDSIPIAWIKPSVQAPGEL--PYNGIYDP 201  
 Qy 294 PEEKEKYVKNPQPKPSSLRIVTESHVGMSSTEPEVNTYANFDDVLRIKKLGYNAYQLM 353  
 Db 202 PPSERYHKYPKPAPRIVTEAHVGMSSEPRVNSREFADDVLPRIKANNYNTQML 261  
 Qy 354 AIQEHSYTASFGHTVTNTYAAASSRFGTDDLSLIXDAHELGILVLMIDVSHASTNTL 413  
 Db 262 AIMEHSYVGSFGHTVTNTYAAASSRFGTDDLSLIXDAHELGILVLMIDVSHASTNTL 321  
 Qy 414 GLNMFD--GTDGHYFHSGPGRGHMWDLSRLPNYGSWEVLRFLSNARWLDEYKFDFGR 470  
 Db 322 GLNCFDGGQSRSYFAGERTGHKLWDSRLPNYANWVRLFLSINRWRWLEEFNFDSFR 381  
 Qy 471 FDGYTSMMYTHHLQVDFGTGNYEYFGATDVAVVYLMLANDMIGHFPEAVTIGEVS 530  
 Db 382 FDGTTSMLYVHHLQMGFTGNYEYFSATDVAVVYMLMLNLLKIFPDATVIAEDVS 441  
 Qy 531 GMPTVCPVEDGVGFDRLHMAVAKRVEILO-KRDEDWKGDIVAMLTNRMRLEKCVS 589  
 Db 442 GMPLSLRPVSEGJGFDRLANAPKIDMIDLKNKNDEDWSMKEVTSLLTRNRYTERCIA 501  
 Qy 590 YAESHDOALVGDKTIAFWLMDKDMYDMLDRPSTPLIDRGVALHKMIRLITMGLGGGY 649  
 Db 502 YAESHDQSIVGDKTAFLMKNEMSGNSCLTDASPVDAGIALDMTHFFANGLGRGV 561  
 Qy 650 LNFMG 654  
 Db 562 PQPHG 566

RESULT 13  
 US-09-609-040-2  
 Sequence 2, Application US/09609040  
 ; Patent No. 6570066  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Willmitzer, et al.  
 ; TITLE OF INVENTION: NUCLEOTIDE SEQUENCES ENCODING ENZYMES THAT ALTER THE CARBOHYDRATE  
 ; FILE REFERENCE: 514413-351.1  
 ; CURRENT APPLICATION NUMBER: US/09/609,040  
 ; CURRENT FILING DATE: 2000-06-30  
 ; PRIOR APPLICATION NUMBER: PCT/EP92/00302  
 ; NUMBER OF SEQ ID NO: 4  
 ; SOFTWARE: PatentIn version 3.0  
 ; SEQ ID NO 2  
 ; LENGTH: 566  
 ; TYPE: PRT  
 ; ORGANISM: Solanum tuberosum  
 ;  
 US-09-609-040-2

Query Match Score 1635.5; DB 4; Length 566;  
 Best Local Similarity 52.2%; Pred. No. 2.1e-150; MisMatches 151; Indels 49; Gaps 9;

Qy 57 SSNVMTASKVLPDGRIBCYSSSTPQLLEAPGTVSEESQVLTDVESLIMDDKIVDEVNK 116  
 Db 4 SWDISSTPKSVRKDERMK-HSSAI-----SAVLTD-----DNS 36  
 Qy 117 ESVPMPRETYSIRKIGSKPRSIPPPGRQRQIYDIDPSLTGFRQHLDYRSQYKRLREEDK 176  
 Db 37 TMAPLEDNTENIG-----LNLNDPLTLEPYLDHFRMRMRYVDQMLIEK 82  
 Qy 177 YEGSLDAFSRSGYEKFGFSTSSETGTITYREWAGTWAALIGDENNNPNADMTQNECGW 236  
 Db 83 YEGPBLERFAQGYLKFGFNREDGCCIVREWAAQAEQEVGDFNRGNSNMMERDQFGTW 142  
 Qy 237 EIFLPNNADGSPPFPHGSVVKIRMDTPSGN-KDSIPIAVTKFSVQAPGEL--PYNGIYDP 293  
 Db 143 SIRIP-DVDSKPVIPHGSRVKIRMDTPSGN-KDSIPIAWIKPSVQAPGEL--PYNGIYDP 201  
 Qy

Qy	294	PEEEKTYKPNOPKPKSSLRIVYESHYGMSSTEPVINTYANPRDVLPRIKKLYNAVQLM	353	Qy	429	GPR-GHHWMDRSLENYGSWEVLRFLLSNARWWLDEYKPDGFRRDPGVTSMAMYTHHGLQVD	487
Db	202	POSERVETKYPKPRAPIYEAHGMSSSEPRVNSYREFADDVPLRITANNNTVQM	261	Db	373	DPREGYHQDNTLILYNGNEVQFOLQGHALYWFEGDGIRVDAVSNTYRNYSRK--	430
Qy	354	AIOEHSYYASFGYHTVNFAASSRGPDDIKSLIDKAHELGGLVIMDTIVHSASHASTNLD	413	Qy	488	FTGNY--NEYFGYATDVAVVYLMLNDMTHGLPPEAVTIGEDVSGMPTVCIPVBDGGYG	545
Db	262	AIMEHSYYSGFGYHTVNFAASNRGPNEDLKYLIDKAHSGLQVLDVTHSHASNNTVD	321	Db	431	-DGEWLPNRY-GGSENLEIAFLQLQTNAVLKSETPGAGSFAESTSPADY--TREAGLN	485
Qy	414	GLNMFD--GTDGHYFHSGSPRGHWWMDSRLFNYSWEVLRFLLSNARWWLDEYKPDGFR	470	Qy	546	EDYRLHMAVADKVKELIOKRDEDMKGDIYHMLTN--REWLEKCVSYAE-----SHDQA	597
Db	382	GUNGFDGQGSESYFAGERYTHKWDLSRIFENYANWEVLRFLLSNARWWLDEYKPDGFR	381	Db	486	FDFKNMGNWHDNTLRYMQE-----DPVHRKTHGRMTFGMMYQYSENFVLPPSHDEV	537
Qy	471	FDGVTSMWYTHGLQVDTFTGNYNEYFGYATDVAVYMLNDMTHGLPPEAVTIGEDV	530	Qy	598	LVGDKTIA----FWLMKDMD--YDEMDALDRPSTPLIDRGVALHKMIRLITNGLGEG	648
Db	382	FDGITSNLYVHGGINNGFTGNYNEYSEATDVAVYMLANLTHKIFPDATVIAEDS	441	Db	538	VHGRKLILGRMGPQDWQOQPANLRAYXGPM-----YGFPGKX	573
Qy	531	GMPTVCLPVEDGGVGPYRLLMNAVDKWKELIQ-KRDEDWKQDGLVHMLTNRRLIEKCVS	589	Qy	649	YLNFGNGNEFSH-P-EWV1DFPRG-DHLPSKVFPGNINYSVDKCRRRFLGNSKHLRHYHGMQ	706
Db	442	GMGPLSRPVSEGGIGFPYRLLMNAIPDKWVYDLKKNKNDDENSMKETSSLNTRYTEKCI	501	Db	574	LL-FNGNEFAQGREN-NYQEGLDWHL-----LDEAGGMWH--KGVQ	609
Qy	590	YAESHDOALVGDKTIAFWLMKDMDYMFALDRPSTPLIDREVALHKMIRLITMGIGGEGY	649	Qy	707	EFDQAIQHLEAY-----GFMTEHOYTSRKDERDRITVFER--GNLUVFVN	751
Db	502	YAESHDOASIVGDKTIAFLMNMKEMYSGMSCLTDASPVVDAFGLDKMHFFHNGLGRGV	561	Db	610	DYVRUHNHYTAHAELYQDQQPCSF-----BWLADDSDNSVVFERRDRAGNRIVIS	664
Qy	650	LNFMG	654	Qy	752	FHWTSSYSYDVRVGCKLKGPKYKIVLDSDDPFLGGFG	786
Db	562	PQFHG	566	Db	665	NFTPVYVREHYRFGYNAPGRYETEUNSDRTQYQSG	699
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RESULT 14							
US-09-579-165-2							
; Sequence 2, Application US/09537120							
; Patent No. 6608018							
; GENERAL INFORMATION:							
; APPLICANT: Martin QUANZ							
; TITLE OF INVENTION: GENETICALLY MODIFIED PLANT CELLS, AND PLANTS WITH AN							
; INCREASED ACTIVITY OF AN AMYLOSUCRASE PROTEIN AND A							
; BRANCHING ENZYME							
; FILE REFERENCE: 014-7-0200P							
; CURRENT APPLICATION NUMBER: US/09/579,365							
; CURRENT FILING DATE: 2000-05-25							
; NUMBER OF SEQ ID NOS: 15							
; SOFTWARE: PatentIn Ver. 2.1							
; SEQ ID NO: 2							
; LENGTH: 762							
; TYPE: PRT							
; ORGANISM: Neisseria denitrificans							
US-09-579-365-2							
Query Match							
Best Local Similarity 12.7%; Score 576; DB 4; Length 762;							
Matches 186; Conservative 108; Mismatches 223; Indels 178; Gaps 33;							
Qy	170	LRBEIDKVEGS---LDAFSRQ-----YKFGFGRS-----TGTIYREWAFTGATWAAL	214	Qy	172	EDYRLHMAVADKVKELIOKRDEDMKGDIYHMLTN--REWLEKCVSYAE-----SHDQA	597
Db	105	VREDDYRFGSALQHTDAWLGEGTHLPIETLGAHFAEMDGVSURPATWAPNARRVSV	164	Db	7	EDIRRWESEG-TFYDSYRKLGAHDDEGTWFCWPHADGVSVIAGFDWNPNAPMLERY	64
Qy	215	IGDFNNNNPNADVM-----TQNECGWNTIFPNADGSPPTPHSGRVTKIRMPGNSKNDSTP	271	Qy	232	ECGYWEIIFLPNNNAQGSPPLPHGSRSVKTIRMDTPESKNDSTPAPKTFSYDAPGELPYNGI	289
Db	165	IGBEPNGDSSRHMRPTGN-----GLWDNIFPG-----VGLN	197	Db	65	GGGIWAGYVPGARQ-----HTYKXIRHGFYQADKTDYIA--FAMEBPTGSJEGLAS	116
Qy	272	AWIKFSY-QAFCEL---PY-----NGIYDPEEKEYVKNPQPKRPKS	311	Qy	290	--YDPPPEEKYVKNPQPKRPKS-----RIVYESHVG-MSSTEPVIN-TYANFR	335
Db	198	ALYKFSYVSLDNCNIREKADPVAFGAELRPTASVVRGL--PAKAEAPAARRRANSVEAP	254	Db	117	IITRDYTHWD---DEWNRRL--KGPSLYEVPSIVEVHLSWRHKRPGEFSYRETA	169
Qy	312	LRIYESHVGMSSTEPVIN--TYANPRDVLPRIKKLGTMAYQOLMAIQHNSYYASFGYH	368	Qy	336	DDVLRERIKLGYNQVLMQIQEHHYASFGYHNTFYASSRIFTDDJLSLIDKAHELG	395
Db	255	ISIYEVHLSGMRNPNENNYWLTYTQLADELVYKDMGFTIELPLSSEPFPGSWYQQA	314	Db	170	EPLADYVQEMGFTIYVTELLPMEHYGSGYQVUYYAATPRYCSQDLMYLDLHQRG	229
Qy	369	TNFYAAASSRGPDDIKSLIDKAHELGGLVIMDTIVHSASHASTNTUGLNMMDGTGCHYFHS	428	Qy	396	LLVMDIVSHASTNTUDGLNMFDGTYHGRMFQGHHWMDSRFLFNGSWEYLREFLIS	455
Db	315	TGLYAPTSRFGSPDELKALIDAHAASIVSLDWAHGFTPDGT-HGLNTPDGT-ALYEA	372	Db	230	IGVILDWPSHFAADP-QGLVFFDGTLLFBDYDPPKMRTHPDWGYTFDYNKPGYRNFLIS	288

Qy 456 NARWILDEYKEDGFRPDGTSMYTHGLQVDTGNYNEFGYATDVDAVYLMJNDMI 515  
 Db 289 NALFWLEKTYDGLRUDAVASMLYDYS RKEWTN--1FGGRENLIEDEFIKENETV 344  
 Qy 516 HGLFPEAVTIGEDVSGMPTVCIPVEDGGFDYRLHMAVADKWEIIQCRDEDWKGMDIV 575  
 Db 345 YLHFPEAMTIABESTAWPGVSAPTYNGLGLYK-----WNMG--- 382  
 Qy 576 HMLTRRWRLEFCVSAYE-----SHDQALVGDKTIAFKWLMDDKDMYDFMALDRSTPLI 627  
 Db 383 -----WMHDTLDYIQRDPIYRKYTHDEL----TFSWYAFSHY-VLPLSDEV-VH 428  
 Qy 628 DRGVALKHM-----IRLITMGLGGE-GYLNFMNEFG-HPEWIDPRGDLLHDS 674  
 Qy 629 GKGSIMWKMPGDDWQKAANURLEFGMMWGHGPKKULFGEEFGQHEMWHTDQEWHLJD 488  
 Db 429 GKFVPGNNYSYDKCRRRFDLGNSKHLRYHGQEFDOAIQHL-----EA1GFMTSB 725  
 Qy 675 GKFVPGNNYSYDKCRRRFDLGNSKHLRYHGQEFDOAIQHL-----EA1GFMTSB 725  
 Db 489 QPY-----HRGTQLWCDLNLHYRTNPALWDGPGF---- 520  
 Qy 726 HQYISRKDERDRLLIVERGN---1YVFNF-----HMTSSYSDYRVGCLPKPCKYKTVL 775  
 Qy 726 :|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:  
 Db 521 -EWIDFSDRDQSVICYLKQAGRMILFVUNFTPVPREH-----YRGVPIGSPWHEYL 572  
 Qy 776 DSDDPLFGFGRLSHADEHFSSEGWDNRPRSMVYTPCRTAVVYALVEDEVENELEPYA 835  
 Qy 576 :|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:|:  
 Db 573 NSDAVAYGGSANGNFGRVAYPESNH-GRPFLETLPLTAALI-----LBPBH 620  
 Qy 836 G 836  
 Db 621 G 621

Sequence 11886, A  
 GenCore version 5.1.6  
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M nucleic - nucleic search, using sw model  
 run on: July 16, 2004, 19:45:05 ; Search time 1584 Seconds  
 (without alignments)  
 7970.882 Million cell updates/sec

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 Perfect score: 2588  
 Sequence: 1 ctctctaacttctcagcgaa.....attatgtatccatgtt 2588

Scoring table: IDENTITY\_NUC  
 Gapop 10.0 , Gapext 1.0

Searched: 3190992 seqs, 243311697 residues  
 Total number of hits satisfying chosen parameters: 6381984

Minimum DB seq length: 0  
 Maximum DB seq length: 200000000000

Post-processing: Minimum Match 0%  
 Maximum Match 100%  
 Listing First 45 summaries

Database : Published Applications\_NA.\*

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 18: /cgn2\_6\_ptodata/2/pubnpa/US06\_NEW\_PUB.seq:/\*  
 19: /cgn2\_6\_ptodata/2/pubnpa/US06\_PUBCOMB.seq:/\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

**SUMMARIES**

result No.	score	Query Match	Length	DB ID	Description
1	1466	56.6	5164	13 US-10-424-599-130849	Sequence 130849, Sequence 872, App
2	1392.4	53.8	2418	9 US-09-938-942A-872	Sequence 872, App
3	1392.4	53.8	2418	11 US-09-938-842A-872	Sequence 1, App1
4	1382.4	53.4	3074	15 US-10-254-534-1	Sequence 1, App1
5	1381.8	53.4	2563	13 US-10-239-145-1	Sequence 19, App1
6	1381.2	53.4	2578	15 US-10-056-454A-19	Sequence 17, App1
7	1380.6	53.3	2529	15 US-10-056-454A-17	Sequence 18, App1
8	1377.8	53.2	3231	15 US-10-056-454A-18	Sequence 16, App1
9	1370.4	53.0	2576	15 US-10-056-454A-16	Sequence 14, App1
10	1316.4	52.7	3033	15 US-10-056-454A-14	Sequence 337, App1
11	1360.4	52.6	2577	9 US-09-938-842A-337	Sequence 337, App1
12	1360.4	52.6	2577	11 US-09-938-842A-337	Sequence 13, App1
13	521.8	3003	15 US-10-056-454A-12	Sequence 13, App1	
14	1341.2	2975	15 US-10-056-454A-13	Sequence 13, App1	

**ALIGNMENTS**

RESULT 1  
 US-10-424-599-130849  
 ; Sequence 130849, Application US/10424599  
 ; Publication No. US20040031072A1  
 ; GENERAL INFORMATION:  
 ; APPLICANT: La Rosa Thomas J  
 ; APPLICANT: Kovalic David K  
 ; APPLICANT: Zhou Yihua  
 ; APPLICANT: Cao Yongwei  
 ; TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated with Plants and Uses Thereof for Plant Improvement  
 ; TITLE OF REFERENCE: 38-21(5323)B  
 ; CURRENT APPLICATION NUMBER: US/10-424-599-130849  
 ; CURRENT FILING DATE: 2003-04-28  
 ; SEQ ID NO 130849  
 ; LENGTH: 5164  
 ; TYPE: DNA  
 ; ORGANISM: Glycine max  
 ; FEATURE:  
 ; OTHER INFORMATION: Clone ID: PAT\_MRT3847\_89164C.1  
 US-10-424-599-130849





Db	2117	TCTTGTGCTTAACCTCACTGGGCCAGGAGACTTTGATTACCGATGTTGCTTC	2236
Qy	2320	AGCCGGAAAGTACAGATACTGATGTCCTGGATTCAGATGATCCTTGTGGCA	2379
Db	2237	AGCTTGGAAATAATAAGCTGATTCCTCTTGTGATTCAATA	2296
Qy	2380	GCGTAGTCTAGTATGATGTCAGGCACTTCAGGCTTGAGTAGATACCGCTCAT	2439
Db	2297	GGCTGATGCCAGAGTACTTACATGCTTATGTTGCTTACGAGAACCTCT	2356
Qy	2440	CCTTCATGTTGTCACACATGAGAAACGCACTGGCTTATGGAGGATGA	2497
Db	2357	CCCTCATGGCTATCACCGTGTAGAAACCCGTGTTATGGAAAACACGA	2414
RESULT 3			
Qy	US-09-938-842A-872	Sequence 872, Application US/0938842A	
		Publication No. US20040009476A9	
		GENERAL INFORMATION:	
		APPLICANT: Harper, Jeff	
		Kreps, JoeL	
		APPLICANT: Wang, Xun	
		APPLICANT: Zhu, Tong	
		TITLE OF INVENTION: STRESS-REGULATED GENES OF PLANTS, TRANSGENIC PLANTS CONTAINING	
		TITLE OF INVENTION: SAME, AND METHODS OF USE	
		CURRENT APPLICATION NUMBER: US/09/938, 842A	
		CURRENT FILING DATE: 2001-08-24	
		PRIOR APPLICATION NUMBER: US 60/227, 866	
		PRIOR FILING DATE: 2000-08-24	
		PRIOR APPLICATION NUMBER: US 60/264, 647	
		PRIOR FILING DATE: 2001-01-16	
		PRIOR APPLICATION NUMBER: US 60/300, 111	
		PRIOR FILING DATE: 2001-06-22	
		NUMBER OF SEQ ID NOS: 53/9	
		SEQ ID NO: 872	
		LENGTH: 2418	
		TYPE: DNA	
		ORGANISM: Arabidopsis thaliana	
		US -09-938-842A-872	
Query Match	53	Score 1392.4; DB 11; Length 2418;	
Best Local Similarity	79.0%	Pred. No. 0;	
Matches 1657; Conservative	0;	Mismatches 441;	
	Indels 0;	Gaps 0;	
Qy	400	TCAAGAAAATTGGATCTAACCAACGGTCATTCTCCACCGCCAGAGGATA	459
Db	3117	TCAAGGAGAGGGTGAACCAAGAAATCTTCCCCACGGGTGATGCCAAGAAATT	376
Qy	460	ATGACATAGATCCAAAGCTTCAAGCTTGTCAACCTAGATTACCGTATTCAAGT	519
Db	377	ATGAGATGACCCCATGTTAGCAACTTACAAATCATTTGATTAACCTATGGACAGT	436
Qy	520	ACAAAGACTCCGAGAGAAATTGACAACATTGAAAGGTAGTCGGATGCTCG	579
Db	437	ATAAAGATTCGGTGTAGGAAATAGCAAGTATGAGGGTGTCTCTCG	496
Qy	580	GCTATGAAALGTTGTTCTTACCCAGAAACAGAAATACTTACAGACTGGCAC	639
Db	497	GCTATGAAAGTTAGGATTTGGCAGTGTGGCTTTCAGTAACTTATAGAGA	556
Qy	640	CAGGACTCTGGGTGCACTGGGAGATTTGTTGCGGAATTCCTAACTCAGAT	699
Qy	557.	CTGGAGTCAAGCTGATCAACTTACGGATTTCAACACTGGAAATTCAAGATA	616
Db			
Qy	700	TCATGACTCAGAATGAGTCGGGTGCACTGGGAGATTTGTTGCGGAATTCCTAACTCAGAT	759
Db	617	TCATGACTCAGAATGAGTTGGTGTGGAGATTTGTTGCGCAACACTGGAAATT	676
Qy	760	CACCAACATTCCCATGGTCTCAGTAAAGATACTGGGAGTACTCACTCGGCCA	819
Db	677	CCCTGCAAACTCCCATGGTCTCAGTAAAGATACTGGGAGTACTCACTCGGCCA	736
Qy	1757	GGTATAGACAGGATGAGTGTGTTTCAGTCACTGGGAGTACTCACTCGGCCA	1816

Qy 1900 TAGATCCTGGACTAGCATGCAAAATTGATCAGGCTTATTACCATGGGATTAGCCGGAG 1959  
 Db 1817 TCGATAGGAAATTGATTCATGGATTAAATGATTAACATGGTTAAGCTGGGTG 1876  
 Qy 1960 AAGGATATTGAATTATGGAAATGAAATTGACACCCGAGTGGATGATTTCCA 2019  
 Db 1877 AAGGTACTAAATTATGGAAACGATTCGGACATCCAGAATGGATGATTTCCA 1936  
 Qy 2020 GAGGTGATCTACATCTCCCAGTGTAATTGGCTCTGGAAACATTACAGTTAGATA 2079  
 Db 1937 GAGGCAGCACGCTCTTCATGGTAGCTTGGAAACATTAGTATGACA 1996  
 Qy 2080 AATGCCCGCGGAGGTTGATCTAGGAAATTCAAAGCATCTGAGATATGGTAAG 2139  
 Db 1997 AATGCCCGCGGAGGTTGATCTGGGATGAGATTATCTCAGAACCGGACTAACAG 2056  
 Qy 2140 AGTTGATCAGCAATTAGCATCTGAAAGGCTTATGGTTCATGACTCTGAGCACC 2199  
 Db 2057 AATTGATCAGGCCATTGAACTCTGAAAGTAATTACGGTTTATGACTCTGGGCAAC 2116  
 Qy 2200 AATACATATCAGGGAGGATCGGATCATTTGCTTCAGAGGGAAACCTCG 2259  
 Db 2117 AATTCAATACAGAAAGGATCGGATCATTTGCTTCAGAGGGAAACCTCG 2176  
 Qy 2260 TTITITGATTCGAATTTCATGGACTAGCAGCTATCGGATTACCGAGTTGGCCTTAA 2319  
 Db 2177 TCTTGTGCTTAACTTCACTGGACCACTCTTGAATCCGGCATGGTCTCCA 2236  
 Qy 2320 AGCCAGAAAGTACAAGTATGCTTGGATTAGATGATCTTGGGCTTGGCA 2379  
 Db 2237 AGCCCTGGAAATTATAGATCTGATTCGATCTGGGCTTCAATA 2296  
 Qy 2380 GGCTTAGCTCATGATGGAGGACTTCACTGGACTAGCTTGAACGGTGTACCAA 2439  
 Db 2297 GGCTCATGCAAGGAGGACTTCACTPATGAGCTGTATAACAGAACGACCTCTG 2356  
 Qy 2440 CCTTCATGGTGTACACACATGTTAGAACGAGGTGTCTATGGAGGTGA 2497  
 Db 2357 CCTTCATGGTGTACACATGTTAGAACGAGGTGTCTATGGAGGTGA 2414

RESULT 4  
 US-10-254-534-1  
 Sequence 1, Application US/10254534  
 Publication No. US2003004670A1  
 GENERAL INFORMATION:  
 APPLICANT: EK, Bo  
 APPLICANT: KHOSRODI, Jamshid  
 APPLICANT: LARSSON, Clas-Tomas  
 APPLICANT: LARSSON, Lars  
 APPLICANT: RASK, Lars  
 TITLE OF INVENTION: STARCH BRANCHING ENZYME II OF POTATO  
 FILE REFERENCE: 003300-496  
 CURRENT APPLICATION NUMBER: US/10/254,534  
 PRIOR APPLICATION NUMBER: US/09/087,277  
 PRIOR FILING DATE: 2002-09-26  
 PRIORITY NUMBER: SE 9601506-0  
 PRIORITY NUMBER: SE 9601506-0  
 PRIORITY NUMBER: SE 9601506-0  
 PRIORITY NUMBER: PCT/SE96/01558  
 PRIOR FILING DATE: 1996-11-28  
 PRIOR APPLICATION NUMBER: SE 9504272-7  
 PRIOR FILING DATE: 1995-11-29  
 PRIOR APPLICATION NUMBER: SE 9601506-0  
 PRIORITY NUMBER: SE 9601506-0  
 SEQ ID NO 1  
 LENGTH: 3074  
 TYPE: DNA  
 ORGANISM: Unknown  
 FEATURE: OTHER INFORMATION: Description of Unknown Organism:belII gene  
 OTHER INFORMATION: (branching enzyme II) from Solanum tuberosum  
 OTHER INFORMATION: (potato)

FEATURE: NAME KEY: CDS LOCATION: (189)...(2825)  
 FEATURE: NAME KEY: sig\_peptide LOCATION: (189)...(332)  
 FEATURE: NAME KEY: mat\_peptide LOCATION: (333)...(2825)  
 FEATURE: NAME KEY: misc\_feature LOCATION: (285)...(287)  
 OTHER INFORMATION: Amino acid -16 is Xaa wherein Xaa = Ile, Leu, Val  
 OTHER INFORMATION: or Phe.  
 FEATURE: NAME KEY: misc\_feature LOCATION: (140)...(1406)  
 OTHER INFORMATION: Amino acid 358 is Xaa wherein Xaa = Leu or Phe.  
 FEATURE: NAME KEY: misc\_feature LOCATION: (1438)...(1430)  
 OTHER INFORMATION: Amino acid 366 is Xaa wherein Xaa = Thr.  
 FEATURE: NAME KEY: misc\_feature LOCATION: (1896)...(1898)  
 OTHER INFORMATION: Amino acid 522 is Xaa wherein Xaa = Tyr, Ser, Cys  
 FEATURE: NAME KEY: misc\_feature LOCATION: (2154)...(2156)  
 OTHER INFORMATION: Amino acid 608 is Xaa wherein Xaa = Pro.  
 US-10-254-534-1  
 Query Match 53.4%; Score 1382.4;  
 Best Local Similarity 76.6%; Pred. No. 0;  
 Matches 1689; Conservative 0; Missmatches 515; Indels 0; Gaps 0;  
 Qy 347 TGTGCAAGTGAAGTAAATAAGGATCTTCCAAATGGGCAAGCTTACATCGAAA 406  
 Db 617 TGGAACCTGGAGCTAAACATTAACATGAAATATTGATGAATC 676  
 Qy 407 AATTCGATCTAACCAAGGTCCATTCTCCACCGGGCAGAGGAAAGATATGACAT 466  
 Db 677 TGATGGATCAGAGGAGGGCATCCCTCAGCTTGACTCTGGTCAAGACATTGAAAT 736  
 Qy 467 AGATCAAGCTTGAAGGGTTTCCTAACACCTPAGATTACGGTTAACAGTACAAAG 526  
 Db 737 AGACCCCTTTGAAAAACTATGGTAAACCTTGAAGGTTAACAGTTAACAGTACAAAG 796  
 Qy 527 ACTCCGAGAGAAATTGAGCTGTTGGAGGTCTTCTGGCTCTGGATGCTATGAC 586  
 Db 797 ACTGGGGCAATTGAGATGAGGTGGTTGGAGGTTTCTGGTGTATGAC 856  
 Qy 587 AAAGTTGGTTCTOACCGAGTGAACAGGAATAACTTATAGAGTGGGACCCAGGGC 646  
 Db 857 AAAATGGGTTTCACTCGTAGTGTACAGGTATCACTAACCTGCACTGGCTCTGGTGC 916  
 Qy 647 TACCTGGGTGCAATTGGAGATTCAATAACTGGAACTCTTAATGCTGACATTATGAC 706  
 Db 917 CCAGTCAGTGGCCCTCATGGGTTAACATGGCCTAACATTGGGCAATTGCTGAC 976  
 Qy 707 TCAGATGAGTGGCTGGTGTGGGAGATCTTTCGCGAATAATCGAGTGGTTCACCC 766  
 Db 977 TCGATGATGATTGGTGTGGGATTTCTGCAATAATGTTGGGATTTCTCTCTC 1036  
 Qy 767 AATTCGCCATGGTTCTCGAGTAAGATAAGGATCTGGATACTCCATCTGGCAACAAAGATC 826  
 Db 1037 AATTCCTCATGGCTCAGAGTGAAGTACGTATGGACACTCCATGGGATTAAGGATC 1096



QY	347	TCTTGGAGATGAGTAATAAGAATCTGTTCATTGGAGACAGTTGGCATCAGAA	406
Db	365	TGGTAACATGGAGGTCTAAACATTAATAACTTTGAAAGACAAATTGTGATC	424
QY	407	AATTGGATCTAACCAAGGTCTATTCTCCACCCGGGAGAAAGCAAGATAATGACAT	466
Db	425	TGATAGATCGAGAGGGCATCCTCACCTTAAACATTAATAACTTTGAAAGACAAATTGTGATC	484
QY	467	AGATCCAAGCTTGACAGGCTTCTGTCAACCTAGATTACCGTATTCACAGTACAAG	526
Db	485	AGACCCCCCTTGTGAAACAACTACGTGATCAGTTCTCGGCTATGAAAG	544
QY	527	ACTCCSAGAAGAAATTGACAACACTATGAAAGTAGTCTCGATGATCAGTTCTCGGCTATGAA	586
Db	545	ACTGAGGGGGCAATTGACAACACTATGAGGTGGTTCGAAGTTCTCGGTTATGAA	604
QY	587	AAAGCTTGTCTTCTCAGCACTGGCAATTGAAACAGATAACTTATGAGACTGGGACACAGAGC	646
Db	605	AAAATGGGTTCTACTGTAGTCTGCTAGGTACTTACCTGAGTGGGCTCTGTC	664
Db	647	TACGCGGGCTGCATGATGGAGATTCAATACTGAAATTCTTAATGAGATGTCATGAC	706
QY	665	CCAGTCAGTCGCCCTCATGGAGATTCAATACTGAAATTCTGAGATTGTCATGAC	724
Db	707	TCTGAGATGAGTGTGGTETCTGGAGATCTTGTGCGAAATAATGCAAGATGGTCAACCAC	766
Db	725	TGGGATGAAATTGGGTCTGGAGATTTCGTGCAAAATTGCAATGTTCTCTGC	784
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Db	785	AATTCTCTCATGGTCCAGAGTCAAGTATGGACACTTACAGTGTAAAGGATT	844
Db	827	TATTCTCTGTTGGATCAAGTCTCATGGTCAACCCAGGTAACCTGGCAT	886
QY	845	CATTCTCTGTTGGATCAACTCTCTTACAGTCTCATGGTCAACCTGGCAT	904
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Db	965	AAAGTCGCTGAGAATAATTGAACTCTCATATGAACTTCGGAAACTTAA	1024
QY	1007	CAATATGCCAACTTAGAGTGTGCTCTCGATCAAAAGCTGGTACATGTC	1066
Db	1025	CTCATACAGTGTGATTCTAGAGTGAATGTTCTCCCTCGATAAAGCTGGTACATGTC	1084
QY	1067	TGTTCAAGCTCTGGTCAAGGCAATTCTATATTGCTACTTTGGTACCTGTCAC	1126
Db	1085	GTTGCAAAATTGGTCAAGGCAATTCTATATTGCTGTTGGTACATGTCAC	1144
QY	1127	AAACTTTTATGCTGGTCAAGGCAATTGGAACTCTCTGATGTTAAAGCTCTTAATAGA	1186
Db	1145	AAATTCTTCACCAAGCACCGCTTGGACTCCGGCTTCAAGCTTGTGATG	1204
QY	1187	TAAGCTCACAGTAGGTCTCTGGTCAATGGTACCTGATGTTCTGATGAA	1246
Db	1205	TAAGCTCATGGCTGGGAACTTGGTCAAGGCACTTCAAGCTGGTACATGAA	1264
QY	1247	TAATAGCTGGATGGCTGAATATGGTGTGATGGTACCTGATGTTCTGATGAA	1306
Db	1265	TAATACTTAAATGGTCAAGGCAAGTGGTACATGTTGAATGGTACTCTGG	1324
QY	1307	ACCACGGGCTCATCTGGAACTGGGACTCTGGCTTCACTAAGGGACTGGGAGGT	1366
Db	1325	AGCTCTGGTATCATGGATGGTCTGGGTTCTGGACTTCCGGCTTCAACTATGAA	1384
QY	1367	TCTAAGTGTCTCTCTCAATTGCAAGGGTCAAGGTGTTGATGGTACTCTGG	1426
Db	1385	ACTTGGTAACTTCTCAATTGCAAGGGTCAAGGTGTTGATGGTACTCTGG	1444
QY	1427	CAGATTGTAGTGGGTGACTCTGAACTGATGTTGAGCTTCACTGGATTTTAC	1484
Db	1445	TAGATTGTGGGTGACTCTGAACTGATGTTGAGCTTCACTGGATTTTAC	1504
QY	1487	CGCGAACATGAACTTGGATATGCAACTGATGTTGAGTATGGTGTGTTATTGAT	1546
Db	1505	TGGAAACTAGGAGAACTTGGACTCTGCAACTGATGTTGAGTGTGTTATTGAT	1564
QY	1547	GCNGTTGAATGATGATGATTGATGTTGATGTTGAGATGTTGCTTCACTGGT	1606
Db	1565	GCCTGTCACAGATCTTCTGACGCTTTCAGCAATTGCAACTGAACTGATG	1624
QY	1607	TAGTGGATGTCACAGTTGCTGATGTTGATGTTGAGCTGGGCTTGTGATPATCG	1666
Db	1625	TAGEGGTGTGCACTTGTGATTCCTGGCTTCAAGTGGGGTGTGTTGATPATCG	1684
QY	1667	TCTCCACATGGCTCTGGTGTGATATAATGGTTGAGATAATTGAGAAGATTG	1726
Db	1685	GCTGCATAGGCAATTGGCTTACATTGCTGATAATTGGTATGGTGTGAGGATTG	1744
QY	1727	GAAATGGGTGACATTGTCATATGCTGACCAACAGGGCTTGTGAAAGTGTGTTTC	1786
Db	1745	GAGAGTGAATGATGTTGTCATACCTGACAAATTGAGTGTGCAAAAGTGTGTTTC	1804
QY	1787	TTATGCTGAAAGCTGATGACCAAGGGCCCTTGTGGTCAACAAACTATTGCTTGGTGT	1846
Db	1805	ATAGCGTGAAGTCATGATCAAGCTCTAGTCGTCGATATAACTATGCACTGTTG	1864
QY	1847	GGCAAGGGATGATGATGAGTCACTTCACTCCCTCATAGATCG	1906
Db	1865	GGCAAGGGATGATGATGTTGCTGGATAGACCTGAACTTAAATGATCG	1924
QY	1907	TGGAGTAGCATGGCAAAATGATGAGCTGGCTTATTACATGGATTAAGGCGAGAA	1966
Db	1925	TGGGATAGGCAATTGGCAAAATGCAAGTGGTGTGAACTATGGATTAAGGAGGTA	1984
QY	1967	TTGGAATTTTATGGAAATGAACTTGTGAACTCCCGAGTGGTGTGTTCCAGAGGTGA	2026
Db	1985	CTTAATTCTCATGGGAAATTGCAACTTGGCAACCTGGCCACCCGAATGGTGTGTTCCCTAGGGCTG	2044
QY	2027	TCTACATCTTCCAGTGGTAAATTGTTCTGGAAATACTTACAGTTGATAAACTGGCG	2086
Db	2045	ACAAACCTCTGATGGCTCATTAATCCGGAAACCAATTCTGATTAAGGCG	2104
QY	2087	GCCTGAGGTTGATCTGGCAATTCAAGGATCTGAGGATATCATGGTAACTGCTTGA	2146
Db	2105	ACGGAGATTGACCTGGGAGATGCGGATTAATTGATCATGGTGTGCAAGAATTGTA	2164
QY	2147	TCAAGCAATTGGATCTGGATCTGAAGAGCCATGGTTCATGACTCTGAGCACAATCAT	2206
Db	2165	CCGGGCTATGGCACTATGCTGACTCTGAGTAAATTGAGTTGATGCTGAAACACAGTCAT	2224
QY	2207	ATCAGGAGGGTAAAGGATCTGGATCATTTGCTTGGAAACCTCTGGT	2266
Db	2225	ATCAAGAAGGAGATGAGTAACTGATGTTGAAAGAAACCTTGTGTTG	2284
QY	2267	ATTCAAATTCTCATGGACTGAGCTTGGGATTAACGGAGCTTGTGCTTAAAGCCAGG	2326
Db	2285	CTTTAAATTCTCATGGCAAAACCTTCACTGAGCTTGGCTGCTGAAGCTGGCTGG	2344
QY	2327	AAAGTACAGATGACTCTGGATTAAGTGTGCTCTGGGCTTGGCTTGGGTTAG	2386
Db	2345	AAATACAGGTTGCTTGGACTCTGGATCACTGGTGTGCTTGGGAAATTGTA	2404
QY	2387	TCTGATGGCAAGGCAACTTCAGTGGTAAAGGTGGTACGATGTTGCTGCACTGTCAT	2446
Db	2405	TCTAAAGGAAACTCTGACCTTGTGAGATGATGTTGAACTTGTCTGTCATTAT	2464
QY	2447	GGCTGTAACACCATGTAAGAACGGCACTGTTGAGTGGGATGAAGTGGAGAA	2506
Db	2465	GGCTGTAACCTGAGGCAACGCTGTCATGAGCTGGCTGTCATGAGCAAGCAAGA	2524
QY	2507	TGAATTGGAAACCTCTGCGCGTTAA	2531

Db	2525	AGAACTGAGCAGTAGTAAAGAAGAA	2549	
<b>RESULT 6</b>				
i	US-10-056-454A-19	Sequence 19, Application US/10056454A		
i	Publication No. US20030166919A1			
i	GENERAL INFORMATION:	National Starch and Chemical Investment Holding Corporation		
i	TITLE OF INVENTION: Improvements in or Relating to Plant Starch Composition			
i	NUMBER OF SEQUENCES: 20			
i	CORRESPONDENCE ADDRESS:			
i	ADDRESSEE: National Starch and Chemical Investment Holding Corporation			
i	STREET: 1000 Uniquemra Blvd.			
i	CITY: Newcastle			
i	STATE: Delaware			
i	COUNTY: United States of America			
i	ZIP: 19720			
i	COMPUTER READABLE FORM:			
i	MEDIUM TYPE: Floppy disk			
i	COMPUTER: IBM PC compatible			
i	OPERATING SYSTEM: PC-DOS/MS-DOS			
i	SOFTWARE: Patent/Release #1.0, Version #1.30			
i	CURRENT APPLICATION DATA:			
i	APPLICATION NUMBER: US/10/056,454A			
i	FILING DATE: 25-Jun-2002			
i	INFORMATION FOR SEQ ID NO: 19:			
i	SEQUENCE CHARACTERISTICS:			
i	TYPE: nucleic acid			
i	LENTH: 2578 base pairs			
i	STRANDEDNESS: single			
i	TOPOLOGY: Linear			
i	SEQUENCE DESCRIPTION: SEQ ID NO: 19:			
i	US-10-056-454A-19.			
Query Match	53.4%	Score 1381.2;	DB 15;	Length 2578;
Best Local Similarity	77.3%	Pred. No. 0;	Gaps 0;	
Matches 1677; Conservatory	0;	Mismatches 493;	Indels 0;	
Db	347	TGTGAAATGAACTAAATAAAGAATCTGTCCAAATGCGGAGACAGTTAGCATCGAAA	406	
Db	350	TGGTAAACTGGAGGACTAAACATTAAATACTCTGAGAGAACAAATTAGTGAATC	409	
Qy	407	AATTGGATCTAACCAAGGTCCATTCCTCACCCGGAGAGAATATGTAAT	466	
Db	410	TGATAGGTATGAGAGGGGCATCCACCTGGACATCTGGTCAAGAGATTGAAAT	469	
Qy	527	ACTCCGAGAAATTGACAAGTATGAAAGTAGTCTGGATGCAATTCTCGTGCCTATGA	586	
Db	530	ACTGAGGGAGCRAATTGAGAAGTATGAGGTGGTGGACGTTCTGGTGTATGA	589	
Qy	587	AAAGTTGGTTCTACGCCAGTGAACAGAAATACTTATAGAGTGCGACAGGCC	646	
Db	590	AAAAATGGTTTCACTCGTAGTGTCTGACAGTATGACTTACCTGGACATGTC	649	
Qy	647	TACGTGGCTGCAATTGAGATTCAATACTGGATCTGGATGCAATTCTCGTGC	706	
Db	650	CCAGTCGTCGCTCTCATGGATTCAACATTGGACAAATGTCGATTA	709	
Qy	707	TCAGAATGACTGTCGTCGATCTGGAGATCTGGATGAAATTGAGATGTC	766	
Db	710	TGGATGAAATTGGTGTCTGGAGATTTCTGCAAAATACTGGATGTC	769	
Qy	767	ATTCGCCATGGTTCTGAGTAAGATACGATGATACCTCCATGGACACAGATC	826	
Db	770	AACTCTCATGGTCAAGTGAACATACCTGGACACTCCATGGTGTAGGATC	829	
Qy	827	TATCCGTCGGATATTACATGGATAGTCAGTCAAGCTTCAGTCAAGTCA	886	
Db	830	CATTCCGCTTCGATCAAATCTCACAGCTTCATGAAATTGATGAAAT	889	
Qy	887	ATACATGATCCCTCAGGAGGAGAATGAGTCTGGATGAACTTCATGAA	946	
Db	890	ATATTGATCCGCCAAGGAGAAAGTCAACCCAGGAAAGAAC	949	
Qy	947	AAATTCACCTTCGCAATTGAGTCTGGATGAACTGGAGCCATGTAAT	100	
Db	950	AAAGTCGTCGAAATTGAGATATGAACTTCGCTAAAGAA	100	
Qy	1007	CACATGCCAACTTGGATGTTGCTTCTGGATCAAAGTGTCTGTC	106	
Db	1010	CTCATACCTGTAATTGAGATGAACTGGTACATGTC	106	
Qy	1067	TGTTAGCTCATGCTTCAAGGATTCATATAGCTGACTTGGTATC	112	
Db	1070	GGTGCNATTGCTTCAAGGATTCATGCTTGGTATGTC	112	
Qy	1127	AACTTTATGCAAGCTAGCAGCTGAACTCTGATGTTAAAGTCTCA	118	
Db	1130	AAATTGTTGACACAGCAGCAGCTTGGACATGCTTGTATGAA	118	
Qy	1187	TAAGCTCACGAGTAGCTGTTCTGTTCTGATGATTGTTCA	124	
Db	1190	TAAGCTCATGACCTAGCAATTGTTCTCATGACATTGTTCA	124	
Qy	1247	TAATAGTTGGTGGCTGAATATGTTGATGACGGATGTTCA	130	
Db	1250	TATACCTTGTAGTGATGCAATTGTTGACGGACCGTATGTTCA	130	
Qy	1307	ACACGGGGTCACTTGTGATGTTGAACTATGGACTGGGGGT	136	
Db	1310	AGCTGTTGTTATCTGGATGGATTGGATGTTCAACTGGGGT	136	
Qy	1367	TCTAGTTTCTTCTTCAAAATCAAGGTGAGTACAGTTGATG	142	
Db	1370	ACPTAGGTATCTCTCAAAATCGAGATGGTTGATGATGTT	142	
Qy	1427	CAGATTGATGGGGTCAATTGATGTTCACTGATGTTGAGTTTAC	148	
Db	1430	TAGTTGATGGTGTGATCATGATGTTGATGTTGATGTTGATG	148	
Qy	1487	CGGAACTACAATGAACTTGGATGCAACTGATGTTGTTGTT	154	
Db	1490	TGGAACATPAGAGGAATACTTGGACTTGCACTGTTGTTGAT	154	
Qy	1547	GCTTTGATGATGATGTTGATCCGGTTGAAGTGGTGTGTTGAT	160	
Db	1550	GCTGTCACAGCTTATTGATGGTTTCCAGATGCAATTGAGATG	160	
Qy	1607	TAGGGATGCCAAGTGGATCCGGTTGAAGTGGTGTGTTGAT	166	
Db	1610	TAGGGATGCCAATTTGGATTCGGTCAAGTGGTGTGTTGAT	166	
Qy	1667	TCTCACATGGCTGATTAATGGTGGATTAATCTGGATGAAAGT	172	
Db	1670	GTCATATGGCAATTGGTGAATATGGTGAATGTTGCTGAA	172	
Qy	1727	AAAGATGGTCAATTGACATATGGTCAACACATGGTGTGTTG	178	
Db	1730	GAGGTGGCTGATGAAAGTGGTCAACATGGTGTGTTGCTG	178	
Qy	1787	TTATGCTGAAAGTCACTGCAAGCCCTGTTGGAAAAGTGTGTT	184	
Db	1790	ATTCGCTGAAATTGATGAACTTCGATGAACTTGGCTG	184	
Qy	1847	GGCAAGGATATGTTGACTTCATGGCTGAACTCATCTGGT	190	
Db	1850	GGAGGAGATGTTGATGTTGGCTGATGACGCCAACATCAT	190	
Qy	1907	TGGATGTCATTGCAACAAATGTCAGTCAAGCTTCAGTCA	196	

b	1910	TGGGATAGATTGACAAAGATGATTAGCCTGTAATCATGGATTAGGAGAACGGTA	1969
y	1967	TTCGATTTATGGAAATGAAATTGGCACACCCGAGTGGATTGATTTCCAGAGGTGA	2026
o	1970	CCTAAATTCACTGGAAATGAAATTGGCACCCTGAGTTCCCTAGGCCTGA	2029
y	2027	TCTACATCTTCCCAGTGGTAAATTGTTGCTCTGGAAACAATTACAGTTGATAAATGCCG	2086
o	2030	ACAAACCTCTCTGATGACTCAGTAATTCCCGAAACCAATTCACTTGTAAATGCAG	2089
y	2087	GCGTAGGTTGATCTAGGAATTCAAAGCATCTGAGATACTGGATGCAAGAGTTGA	2146
o	2090	ACGGAAATTGACTTGAAGGGATGGAGATCGAGATAATTAAAGATACTCTGAGAATTTG	2149
y	2147	TCAAGCAATTAGCATCTTGAAAGGCCATGCTTGTAGACTCTGAGCCAATAACAT	2206
o	2150	CCGGCTATGCAATTGCAAAACCACTGATCAT	2209
y	2207	ATCAGGAGGATGAAAGGATGGATCTTGAAAGGCCATGCTTGTAGCTTGTGTTG	2266
o	2210	ATCAGGAAAGGATGAAAGGATGGATGGATCTTGAAATATGAGTTATGACTTCAGA	2269
y	2267	ATTCATTTTCTGGACTAGCGCTATTGGATTACCGATTCGAGTTGGCTGTTAACGCCAGG	2326
o	2270	CTTTAATTCTACTGGACAAAAGCTTTCAGACTATGCACTATGGCTGCTGAAAGCTCTGG	2329
y	2327	AAAGTACAGATAGCTTGATTGATGATCCTTGTGGCTTGGAGGGCTGTAAGTACCCGGCTCTGCACTTGTGCTTCAGAT	2386
o	2330	AAATAACAGGTTGCCCTGGACTCAGATGATCCACTTTTGTGGCTTCGGAGAAATTGA	2389
y	2387	TCTATGATGAGAGCACTTCAGTTGGAGGGCTGTAAGTACCCGGCTCTGCACTTGTGCTTCAGAT	2446
o	2390	TCATAATGCGAAATTACCTTGGAGGTGTAATGATGTCGTCCTCTCAATTAT	2449
y	2447	GGGTGACACCCATGTAGAACAGCAGCTPATGCTTACTGGAGATGAGTGGAGAA	2506
o	2450	GGCTATGAGACCTGTAAGACGGCTPATGCTTACTGGAGATGAGTGGAGAA	2509
y	2507	TGAATGGAA	2516
o	2510	AGACGAA	2519

RESULT 7  
3-10-056-454A-17  
Seminar 17 Annulation TTS/10056454A

Publication No. US20030166919A1  
GENERAL INFORMATION.

**GENERAL INFORMATION:**  
**APPLICANT:** National Starch and Chemical Corporation  
**TYPE OF BUSINESS:** Manufacturer

TITLE OF INVENTION: Improvement  
NUMBER OF SEQUENCES: 20

**CORRESPONDENCE ADDRESS:**  
**ADDRESSEE:** National Starch

STREET: 1000 Uniqema Blvd.  
CITY: Newcastle

STATE: Delaware COUNTRY: United States of America

COMBINED PERIODIC FORM.  
ZIP: 19720

CONFILER READER/DISK FONK: MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC COMPATIBLE  
OPERATING SYSTEM: PC-DOS/MS

**SOFTWARE: PatentIn Release  
CURRENT APPLICATION DATA:**

APPLICATION NUMBER: US/10/0  
FILING DATE: 25-Jun-2002

INFORMATION FOR SEQ ID NO: 17:  
SEQUENCE ID: 22 JUN 2002

SEQUENCE CHARACIEKISTICS:  
LENGTH: 2529 base pairs

TYPE: nucleic acid  
STRANDEDNESS: single

TOPOLOGY: linear  
SEQUENCE DESCRIPTION: SEQ ID NO:

US-10-056-454A-17	Query Match	Best Local Similari	Local Simili	Matches 1674; C
	Qy	347 TGTG		
	Db	343 TGGA		
	Qy	407 AATT		
	Db	403 TGA		
	Qy	467 AGAT		
	Db	463 AGAC		
	Qy	527 ACTG		
	Db	523 ACTG		
	Qy	587 AACG		
	Db	583 AAAA		
	Qy	647 TACC		
	Db	643 CCAG		
	Qy	707 TCAG		
	Db	703 TCGG		
	Qy	767 AATT		
	Db	763 AATT		
	Qy	827 TATT		
	Db	823 CATT		
	Qy	887 ATAT		
	Db	883 ATAT		
	Qy	947 AAAA		
	Db	943 AAAC		
	Qy	1007 CACG		
	Db	1003 CTCA		
	Qy	1067 TGTT		
	Db	1063 GGTC		
	Qy	1127 AAA		
	Db	1123 AAAT		
	Qy	1187 TAAT		
	Db	1183 TAAT		
	Qy	1247 TAAT		
	Db	1243 TAAT		
	Qy	1307 ACCG		
	Db	1303 AGCT		

Qy	1367	TCTAAGGTTCTTCAAAATGCAAGGTGGTGTGGATGAGTACAAGGTTGATGGTT	1426	Db	2447	GTTGTACACCCATGTAACAGCAGTGGCTATGGTCTATGGTTGTGGAGTGAGAA	2506
Dbl	1363	ACTTAGTATCTTCCTCAAAATGGAGATGGTGTGGATGAGTCAAATTGATGGATT	1422	Db	2443	GGTGTATGCACCTAGTAAAGCAGCTGGCTATGGTCTATGGACTAGTGTCTATG	2502
Qy	1427	CAGATTGATGGGTGACTTCAATGATAACCCATGATTGAGTGGTACAGTTTAC	1486	Db	2507	TGAATTGGAACCTGCGCGTTAA	2531
Qy	1423	TAGATTGATGGTGTGACATAGTAACTACACCGGATTATGGTCTGGATCAC	1482	Db	2503	AGAAGAAAAGANCCNGNAGAA	2527
Qy	1487	GGGACTACTAATGATAACTTGGATATGCACTGATGTTGTTTATTTGAT	1546			RESULT 8	
Qy	1483	TGGGAACTTACAGGAACTTGGCTTCAACTGATGTTGAGTTCCTGTTGTTGAT	1542			US-10-056-454A-18	
Qy	1547	GCTGTGTGAAATGATAATGATTGATGCTGTCCTCCAGAGGGCTGACCATGGTCAAGAGTGT	1606			i Sequence 18 , Application US/10056454A	
Qy	1543	GCTGTGTGAAATGATAATGATTGATGCTGTCCTCCAGAGTCAATTGAGTGT	1602			Publication No. US2003016691A1	
Qy	1607	TAGTGGAAATCCACAGGTGATTCGATTCGCTGGTGGTGGCTTGGATTATCG	1666			GENERAL INFORMATION:	
Qy	1603	TAGCGGAATGCCGACATTGTGATTCCTCCCTCAAGATGGGGTGTGCTTGAATCG	1662			National Starch and Chemical Investment Holding Corporation	
Qy	1667	TCTCACCATGGCTGGTGTGATAAAATGGTGGATGATTCAAGAGAGATGAAGATTG	1726			TITLE OF INVENTION: Improvements in or Relating to Plant Starch Compositi	
Qy	1663	GCTGCGATGGCGATGGCGATGGTCAAAATGGTGGATGAGTGGGGTT	1722			NUMBER OF SEQUENCES: 20	
Db	1663	GGTGGATGATGGCGATGGCGATGGTCAAAATGGTGGATGAGTGGGGTT	1722			CORRESPONDENCE ADDRESS:	
Qy	1727	GAATATGGGGGACATGGTGTGACATATGCTGACCAACAGGGCTGGTGGTTC	1786			ADDRESSE: National Starch and Chemical Investment Holding Corporati	
Qy	1723	GAGATGGGGTGTATGGTGTATACCTGAAATAGAAGATGGTGGTTC	1782			STREET: 1000 Unigema Blvd.	
Qy	1787	TTATGCTGAAAGCTGATGACCGGCCCTGGTGTGACAACAAATGGTGGTGTGAT	1846			CITY: Newcastle	
Qy	1783	ATMCCCTGAAAGTCATGATGAACTGGTGTATACTGGTGTGAT	1842			STATE: Delaware	
Qy	1847	GACAGAGGATATGATGACTTCAAGCTGATGGCTCTCATAGTCG	1906			ZIP CODE: 19720	
Qy	1843	GCAAGGGATATGATGACTTCAAGCTGATGGCTCTCATAGTCG	1902			COMPUTER READABLE FORM:	
Qy	1907	TGGACTAGCATGACAAAATGATGACTGGCTTAACTATGGTAACTGGGATAGCAGCAAGGATA	1966			MEDIUM TYPE: Floppy disk	
Qy	1903	GGGATAGCATGACAAAATGATGATTGGTGTAACTATGGTAACTGGGAGAGGTA	1962			COMPUTER: IBM PC compatible	
Qy	1967	TGGATATTGCGAAATGAAATTGGACACCCGACCTGGATGATTTCCAGAGGTGA	2026			OPERATING SYSTEM: PC DOS/MS-DOS	
Qy	1963	CCTAAATTCATGGAAATGAAATTGGCAACCTGGTGTGATTCCTGGCTGA	2022			SOFTWARE: Patent in Release #1.0 , Version #1.30	
Qy	2027	TCTACATCTCCAGTGTAAATTGGTCTCTGGAAACATTAGTATGATAATGCC	2086			CURRENT APPLICATION DATA:	
Qy	2023	RCAAGACCTCTCTGATGGTCATTAATTGGTAACTATGGTAAATGAG	2082			APPLICATION NUMBER: US/10/056 , 454A	
Qy	2087	GGTAGGTTGTGATGGGAAATTCAAGCTGATGGTAAATTGGTCTCTGGAAACATTAGTATGATAATGCC	2146			FILING DATE: 25-Jun-2002	
Qy	2083	ACGGGATTTGACCTGGGAGATGAGAATATTAGATCATGGGTGCAAGGATTGA	2142			INFORMATION FOR SEQ ID NO: 18 :	
Qy	2147	TCAAGCAATTGAGCATCTGAAAGGCTTATGGTCTCTGAGCACAATACAT	2206			SEQUENCE CHARACTERISTICS:	
Qy	2143	CGGGCTATCAGTATGAGATAAAATGAGTTTGTAACTGAGACACCAAGTGT	2202			LENGTH: 3231 base pairs	
Qy	2207	ATCAGGAAAGGATGAAGGCTTATGGTCTCTGAGCAGGGAAACCTGTTTGT	2266			TYPE: nucleic acid	
Qy	2203	TCAGAAAAGGATGAGGAGTAGATGTTGAAAGGAAACCTGTTTGT	2262			STRANDEDNESS: single	
Qy	2327	AAAGTACAAGAAGTAGCTTGTGATGAGTATGGTCAAGATGTTGCAAGGTGTAG	2386			TOPOLOGY: linear	
Qy	2323	AAAATACAGGTTGGCTGAGATTCAATCTGAGATTCAGTAACTGGGAGAAATGAAATGAGAA	2382			SEQUENCE DESCRIPTION: SEQ ID NO: 18 :	
Qy	2267	ATCAATTTCATGGTACTAGTGGACTTGGTAACTGGTCTCTGGAGTTCCTGAGCTTGTGAAATGAAATGAGATGTTGTTGT	2326			US-10-056-454A-18	
Qy	2263	CTTAATTTCATGAGATAAAATGAGTTTGTAACTGAGCTATGGCTGAGCCCTGG	2322			Query Match	
Qy	2327	AAAGTACAAGAAGTAGCTTGTGATGAGTATGGTCAAGATGTTGCAAGGTGTAG	2386			Best Local Similarity 53.2% ; Score 1377.8 ; DB 15 ; Length 3231;	
Qy	2323	AAAATACAGGTTGGCTGAGATTCAATCTGAGATTCAGTAACTGGGAGAAATGAAATGAGAA	2382			Best Local Similarity 76.1% ; Pred. No. 0 ; Matches 1694 ; Conservative 2 ; Mismatches 529 ; Indels 0 ; Gaps 0 ;	
Qy	2087	GGTAGGTTGTGATGGGAAATTCAAGCTGATGGTAAATTGGTCTCTGGAAACATTAGTATGATAATGCC	2146	Db	656	TGTTGAGATGAGTAAATAGAATATGAGTACCTTCCACCCGGAGACAGTTAGCATGAGAA	406
Qy	2083	ACGGGATTTGACCTGGGAGATGAGAATATTAGATCATGGGTGCAAGGATTGA	2142	Db	657	TGCTTAATCTGGGGAGTCTAACATAAAATGAGTACCTTCTGAGAAGAACATATTGTGAAATC	715
Qy	2147	TCAAGCAATTGAGCATCTGAAAGGCTTATGGTCTCTGAGCACAATACAT	2206	Db	658	TGTTGAGATGAGTAAATAGAATATGAGTACCTTCCACCTGATTACCGTATTCAAGTACAGTAAAG	466
Qy	2143	CGGGCTATCAGTATGAGATAAAATGAGTTTGTAACTGAGACACCAAGTGT	2202	Db	659	TGATAGGATTCAGAGGGATCTCCACCTGGACTTGTCAAGAATTGTGAAAT	775
Qy	2207	ATCAGGAAAGGATGAAGGCTTATGGTCTCTGAGCAGGGAAACCTGTTTGT	2266	Db	660	AGATCCAAAGCTGACAGCTTCTGTCGAAACCTGATTACCGTATTCAAGTACAGTAAAG	526
Qy	2203	TCAGAAAAGGATGAGGAGTAGATGTTGAAAGGAAACCTGTTTGT	2262	Db	776	AGACCCCTTTGACAACTATGTCRAACCTTGTATTACGGTACAGGTTACATGTCACCTGGGTTGTTGAAAT	835
Qy	2327	AAAGTACAAGAAGTAGCTTGTGATGAGTATGGTCAAGATGTTGCAAGGTGTAG	2386	Db	836	AATGAGGAAAGGCAATTGAGATTCAACTATGGGTTGTTGAAAGTTTCTGGTTGTTGAA	895
Qy	2323	AAAATACAGGTTGGCTGAGATTCAATCTGAGATTCAGTAACTGGGAGAAATGAAATGAGAA	2382	Db	955	CCAGTCAGCTGCTGTCATGGAGATTCAATCTGAGCAATTGCTGACATTATGAC	1015
Qy	2267	ATCAATTTCATGGTACTAGTGGACTTGGTAACTGGTCTCTGGAGTTCCTGAGCTTGTGAAATGAAATGAGATGTTGTTGT	2326	Db	956	TGAAATGAGTGTGTTCTGGAGATCTTTGCCCATAATTGCAAGATGGTTCACCC	766
Qy	2263	CTTAATTTCATGAGATAAAATGAGTTTGTAACTGAGCTATGGCTGAGCCCTGG	2322	Db	896	AAAATGGTTTCACTGTAGTCAGTGTCACTTACCTGACTGTTCTGCTGTC	955
Qy	2327	AAAGTACAAGAAGTAGCTTGTGATGAGTATGGTCAAGATGTTGCAAGGTGTAG	2386	Db	1016	TGCGAAATGTTGGGAGATTTCCTGCAAAATGTTGAGATTGTGTTCTGGCTG	1075



APPLICATION NUMBER:	US/10/056,454A
FILING DATE:	25-Jun-2002
INFORMATION FOR SEQ ID NO: 16:	
SEQUENCE CHARACTERISTICS:	
LENGTH:	2576 base pairs
TYPE: nucleic acid	
STRANDEDNESS: single	
TOPOLOGY: linear	
SEQUENCE DESCRIPTION: SEQ ID NO: 16:	us-10-056-454A-16
Query Match	53.0%; Score 1370.4; DB 15; Length 2576;
Best Local Similarity	77.3%; Pred. No. 0; Mismatches 491; Indels 2; Gaps 1;
Matches 1677; Conservative 0;	
Qy	3477 TGTGAGATGAGATAAAGAAATCTGTICCAATGGGAGACAGTAGCATAGAAA 406
Db	350 TGGTAAACTGGAGGAGTCATAACATTAATACTCTGAAAGAACATTATTGTGAAATC 409
Qy	407 AATTGGATCTAACCAAGGTGCCATTCTCCACCCGGCAGAGGCAAAGAAATATGACAT 466
Db	410 TGTAGTAACTCACAGAGGGGGATCCCTCACCCTGACATTTGTCAGAAGATTAAATGA 469
Qy	467 AGATCCAAAGCTTGACAGCTTGTGTCRAACACTAGATTACCGTTATTCAAGTACAAAG 526
Db	470 AGACCCCCTTTGACAAACTATCGTCACACCTGTGATTCAAGTACAGTACAGAA 529
Qy	527 ACTTCGAGAGAAATTGACAAGTAGGAGTGTGGTAGCTTCTCGTGGTATGA 586
Db	530 ACTGAGGGGGCAANTICAAGTATGAGGTTGGAGCTTCTCGTGGTATGA 589
Qy	587 AAAGTTGTCTTCACCGAGAACGAAACTTATAGAGACTGGGACCAAGGAGC 646
Db	590 AAAATGGTTOACTGTAGCTGACCTACCTGGTACATGGTACATGGTGGCTCTGGTGC 649
Qy	647 TAGTGGCTGCATTGATGGAGATTCAATAACTGGAAATCTTAATGCAATGTCATGAC 706
Db	650 CGAGTCAGTCGCCTCATGGATTCAACATTGGACAAATGTCACATTATGAC 709
Qy	707 TCAAGATGAGTGGTCTGGAGATCTGGAGATGTTGGCAATAATGGGTTACCAAC 766
Db	710 TCGGAATGAAATTGGCTCTGGAGATTTCCTGGCAATAATGGTGTGTTCTCGTGC 769
Qy	767 AATTCCCCTGGTTCTGGTAAAGATAACGATGGATAACTCCATCTGGAAACAAGATC 826
Db	770 AATTCTCTATGGTCCAGAGTCAGAGTCACTGGACATCTCATGGTTAAAGATC 829
Qy	827 TATTCCCTGGTGGATCAAGTTCTCAGTTCAAGCCACAGGGAATCTCCATAATGGCAT 886
Db	830 CATTCCCTGGTGGATCACTCTGGATCACTCT--TACAGCTTCCCTGATAAATTCCATAATGGAT 887
Qy	887 ATACTATGATCTCCAGGGAGGAGAATGTTGCAAAATCTCAGCCAAAGGCC 946
Db	888 ATATTATGATCCACCCGAGAGGGATAATCTCCATGAAATTGGTGTGAAAGAAC 947
Qy	947 AAAATCACTTCGGATTTAGTCGCACTGGTAAAGTAGTACGGACAGTAAATTA 1006
Db	948 AAAGTCGTTGAGATAATGAACTCATATGGTAAAGTAGTACGGACAGTAAATTA 1007
Qy	1007 CACATATGCCAACCTTAACTTAAAGATGATGTCCTCTCCGATCAAAAGCTGGCTACATGTC 1066
Db	1008 CTCATACCTGAAATTGGCTTACATGCACTGGTGTGAAACTTGGTGTGAA 1067
Qy	1067 TGTTCACTGCTCAGGCTATTCAGAGCATTCATATTGCTAGTTGGPATACTGAC 1126
Db	1068 GCTGCAAAATTGGCTTACAGAGCATTCATTTAGTCAGTTGGTGTGAA 1127
Qy	1127 AAACTTTTATGCACTGCTAGCAGCGGATTTGAACTCTCTGTTGAAAGCTTCTATAGA 1186
Db	1128 AAATTTTGGTGGACCAARGAGCCATTGGCTTGGCTAAAGCTTGTGAA 1187
Qy	1187 TAAGCTGACGAGCTTGGATGAGTCTCTGGTCTCATGGATATGGTCACTGATCAAC 1246
Db	1188 CTTAATTTCACTRGCACAAAAGGTTACAGCTATCCATGGCTGAGCTGG 2327
Db	1188 TAAAGCTCATGAGTAGGATTGTTCTCATGGACATTGGTCAAGCCATGATCAA 1247
Qy	1247 TAATACGGTGGATGGCTGAAATTATGTTGATGGTACGGATGETCAACTTTCACCTCTGG 1306
Db	1248 TAATACCTTGTAGTCAGTCAACATGTTGACGGCAACCTGGTACTTTCACCTCTGG 1307
Qy	1307 ACCAGGGGTCAATTGGATGGACTCTCGCCCTTCAACTATGGAGCTGGAGGT 1366
Db	1308 AGCTCGTGTGTTGATGGTAAACTGGAAACTGGAGGT 1367
Qy	1367 TCTAAGGTTCTCTTCAATGCAAGGGTGGTGTGATGGGTTGATGGATT 1426
Db	1368 ACTTAGGATCTCTCAAAATGGGAGATGGTGTGATGGATTCAATTGGATT 1427
Qy	1427 CAGATTGGATGGGGTCAATGCAACTGATGAGTCTGGGGTTATTGTAT 1486
Db	1428 TAGATTGTGATGGTGTGACATCAATGATGATACTCACCAGGATTCTGGGATTCAC 1487
Qy	1487 CGGCACTACAACTGAACTTTCGATGAGTCAACTGATGAGTCTGGGGTTGATCTGT 1546
Db	1488 TGGGAACTACAGGAAATACTTTCGATGAGTCAACTGATGAGTCTGGGGTTGATCTGT 1547
Qy	1547 GCTGTGTAATGATGATGATGATTCATGTCCTCCAGAGGGTGTGACACATTGGTAAAGATG 1606
Db	1548 GCTGTGTCACGATCTTATCATGGCTTTCAGATGCAATTACATGGTAAAGATG 1607
Qy	1607 TAGNGGAAATGCCAACAGTTGCATTCCGGTTGAAAGATGGTGTGGCTTGGCTTGTATATG 1666
Db	1608 TAGCGGAATGCCGAACTTGGTAAAGTTCAGAGTGGGGTTGACTATGCT 1667
Qy	1667 TCTCCACATGCCCTCTGCTGATATAATGGTTGAGATAATTCCAGAAGAGATGAAAGATG 1726
Db	1668 GCTGCAATATGGCAATTGGTATAATGGATTGACTGTGACTGTCAGAAACGGATGAGGATG 1727
Qy	1727 GAAATGGGTGACATTGACATATGTCACCAAGGGCGCTGGTTGGAAAAGTGTTTC 1786
Db	1728 GAGACTGGGTGATATGGTCACTGCAAAATAAGATGTCGAAAAGCTGTTTC 1787
Qy	1787 TTATGCTGAAAGTCATGACCCGGCTTGTGGACAAAACATTCGATTGTTGGCTGAT 1846
Db	1788 ATACCTGAAAGTCATGTCAGTCAAGTCTACTGGTGTAAACTATAGATTCTCGTGTAT 1847
Qy	1847 GGACAGGATATGATGATGACTTCATGTCATGGCTCTCTCATGATGTC 1906
Db	1848 GGACAGGATATGATGATTGATGATTGATGCTGATGATGAACTCATTAATAATGATC 1907
Qy	1907 TGGACTAGCATGGCAAAATGATGAGCTTAACTGGGATTAGGGATTCAGATTCAGGATTCAGGTTG 1966
Db	1908 TGGGTAGCTGGTCAAGATGATTGGGTTGTAACATGGGATGAGGGAACTTCCCTAGGCTGA 1967
Qy	1967 TTGGAATTTATGGAAATGAAATTGGGACCCGGAGTGGATTGATTCATGACTCTGTTG 2026
Db	1968 CCTAAATTTCATGGAAATGAAATTGGCCACCTCTGAGTGGATTGATTCATGACTCTGTTG 2027
Qy	2027 TCTACATCTTCCCAGGGTAAATTTGTTCTGGGAAACATTACAGTTATGATAATGGCC 2086
Db	2028 ACAACCCCTCTGATGACTCAGPAATTCCGGAAACCAATTGGATGATGATAATGTCAG 2087
Qy	2087 CGGTAGGTGATCTGGCAATTCAAGGATCTGAGATTCATGGATTCAGGTTG 2146
Db	2088 ACGGAGATTGACCTGGGAGATGRRGAATATTAGATACCGTGGTTCAGAATTTG 2147
Qy	2147 TCAAGGAATTCACTGATCTGAGGATCCATCATGGTTCTGACCTCTGACCAATACAT 2206
Db	2148 CGGGCTTCTGGCTATCTGAGATAATGGTGTGTTGATGACTCAGACCCAGTTG 2207
Qy	2207 ATCAGCGAAGGATGAAAGGATCCATCATGGTTCTGGCTTAAAGCCAGG 2266
Db	2208 ATCAGCGAAGGATGAGGATGAGTGGATTGATAATGGTGTGTTG 2267
Qy	2267 ATTCAATTTCATGGCTTACAGGACTAGCAGCTTACGGGATTACCGAGTTGGCTTAAAGCCAGG 2326
Db	2268 CTTAATTTCACTRGCACAAAAGGTTACAGCTATCCATGGCTGAGCTGG 2327

Qy	2327	AAAGTACAGAAGATGCTGGATTCAAGATGATCCTTGTGGGCTTTGCCAGGTTAG	2386	Qy	587	AAAGTTTGCGTTCTCACGGCAGTGAACAGGAATACTTATAGAGTGGCCACCGAGGC	646
Db	2328	AAATAAGAGGTCGGTCCGGTCACTGATGTCACCTTGTGGCTCGGAGATTGA	2387	Db	813	AAAATGGGTTCAATCCTGTTAACGTTACGTTACGTTCTTGGGCTCTTGGTGC	872
Qy	2387	TCTATGTCAGACCACTCAGGTTGAAGGGTGTACGATAACCGGCGCTCGATCCTCAT	2446	Qy	647	TACGTGGCTGCACTGGATTGATGGAGATTCAATACTGGAATCTTATGAGATGTCATGAC	706
Db	2388	TCATAATCGCGATAATTACCCCTTGAAGGTGATGATGTCCTCGTCAATTAT	2447	Db	873	CCAGTCAGCTGGCCCTCATGGAGATTCAACATTGGACCCAAATGGTGCACATATGAC	932
Qy	2447	GCTGTACACACCATGTAAGAACGGACTGTCATGCTTACTGGAGTAGAGTGGAGAA	2506	Qy	707	TCAGAATGACTGTGGTGTGGAGATCTGGAGATAATGGAGATGTTCCACACC	766
Db	2448	GCTGTACACCCCTGTAGAACAGCACTGTCATGACTAGAACAGAACAGAA	2507	Db	933	TGGGATGAATTGGTGTGGAGATTTCGGAGAAATATGGTGAATTCCTGTC	992
Qy	2507	TGAATTGAA 2516		Qy	767	AATTCCCATGGTTCTCGAGTAANGATAAGCATGGATACTCCATGGCAAACAGATTG	826
Db	2508	AGRAAGAGAA 2517		Db	993	AATTCCCTATGGTCAGACTCCATGGACACTCCATGGAACTTAACTGGATTCA	1052
<hr/>							
RESULT 10							
; Sequence 14, Application US/10056454A							
; Publication No. US20030166919A1							
; GENERAL INFORMATION:							
; APPLICANT: National Starch and Chemical Investment Holding Corporation							
; TITLE OF INVENTION: Improvements in or Relating to Plant Starch Composition							
; NUMBER OF SEQUENCES: 20							
; CORRESPONDENCE ADDRESS:							
; ADDRESSEE: National Starch and Chemical Investment Holding Corporation							
; STREET: 1000 Unigema Blvd.							
; CITY: Newcastle							
; STATE: Delaware							
; COUNTRY: United States of America							
; ZIP: 19720							
; COMPUTER: READABLE FORM:							
; MEDIUM TYPE: FLOPPY disk							
; COMPUTER: IBM PC compatible							
; OPERATING SYSTEM: PC-DOS/MS-DOS							
; SOFTWARE: PatentIn Release #1.0, Version #1.30							
; CURRENT APPLICATION DATA:							
; APPLICATION NUMBER: US10/056454A							
; FILING DATE: 25-Jun-2002							
; INFORMATION FOR SEQ ID NO: 14:							
; SEQUENCE CHARACTERISTICS:							
; LENGTH: 3033 base pairs							
; TYPE: nucleic acid							
; STRANDEDNESS: single							
; TOPOLOGY: linear							
; NAME/KEY: CDS							
; LOCATION: 145..2790							
; SEQUENCE DESCRIPTION: SEQ ID NO: 14:							
<hr/>							
Qy	US-10-056-454A-14	Score 13.64; DB 15; Length 3033;		Qy	1187	TAACCTCAGGTTAGCTCTTCTCATGGATATTGTTCTAGCCATGCTAAC	1246
Query Match	52.7%	Pred. No. 0;		Db	1413	TAACCTCATGCTCTCAATGGTTCTCATGGATATTGTTCTCATGGCTAAC	1652
Best Local Similarity	75.9%	Mismatches 0;		Qy	1247	CAGATTGATGGCTGAATATGGTCAACTCATGGATTTAC	1486
Matches 1685; Conservative		Indels 0;		Db	1653	TAGATTGATGGTGAATCATGATATTGCTAACCGGATTATCGTGGATTAC	1712
Qy	3447	TCTTGGAGTAGTAAATAAGAAATCTGTTCCAATGCCAGACAGTTGCCATGAA	406	Qy	1487	CGCAACTACAATGAAACTTGTGAGTCACTGTTGAGTGTGTTATTGTGAT	1546
Db	5713	TGGTAACACTGGAGGTCAAAACATTAATTAATCTGAAAGACAAATTGTAATC	632	Db	1713	TGGAACTAGGAAATACTTGTGAGTCACTGTTGAGTGTGTTACTGATGAT	1772
Qy	4097	AATTGGATCTAAACCAAGTCCATTCTCCACCCGGCAGAGGCCAAAGAAATATGAC	466	Db	1547	GCTGTGTAATGATGATGATGATGCTGGCTGTCACCATGGTAAGATGTT	1606
Db	6313	TGATAGGATCAAGAGGAGGGTCACTTCCACCTGGACTTGTGAGAATTGAA	692	Db	1773	GCTGTGCAACGATCTTACGTTGCTAACATGGTGAATGATGTTGATGAT	1832
Qy	4677	AGATCCAGTGGCTGACGGCTTCGTCATAACCTGAGTAACTGGTATTCAAGTAAAG	526	Qy	1607	TAGTGAATGCCAACAGTGGTCACTGTTGAGTGTGTTGAGTATGAT	1616
Db	6933	AGACCCCTTGTGACAACTATCGTCAACCTGTTGAGTAACTGGTATTCAAGTAAAG	752	Db	1833	TAGCCGAATGCCAACATTTGATTCCGCAATTTGCTTGGCTTGTGAT	1892
Qy	5277	ACTCCGAGAAGAAATTGCAACTGAGTAACTGGTCACTTCTGTCATGAA	586	Db	1667	TCTCCACATCGCTGTGCTGATAAATGGTTGAGATTTCAGAAAGAGATGAA	1726
Db	7533	ACTGAGGGCAATTGCAAGTATGGTGGTGTGTTGAGTAACTGGTCAAC	812	Qy			



Qy	951	TCACTTCGGATTATGAGTCGACGTTGAAATGAGTAGTACCGAGCCGTAACTAACACA	1010	2031 CATCTTCCCAGTGGPAAATTGTTCTGGAAACAATTACAGTTATGATAAATGCGGGCT 2090
Db	973	TCGGTGCCTATATGATCACTATGTCGATTAGTACCGAGCCGTAACTAACACA	1032	2053 CACCTTCCTCATGGAGAGTCATCCCTGGGAAATGGAGCT 2112
Qy	1011	TATGCCACTTAAAGATGATGCTTCCTCGCATCAAAGCTTGCTCACATGGAAACCAAGATAATACA	1070	2091 AGGTGTGATCTAGGGATTCAAGGATCTGAGATTCATGGATCAAGTTGATCAA 2150
Db	1023	TATGCCACTTAAAGATGATGACTTCCTCGTATAAAAGCTAGCTTAATGCTGTG	1092	2113 AGGTGTGATCTGGGAGTCAGATGGAAATCTAGATCTAGATCCAGAGTTCATCGA 2172
Qy	1071	CAGCTCATGGATTCAAGGATTCAATTATGCTGAGTTGGPATCAGTCACAAAC	1130	2151 GCAATTTCAGCATCTGAAAGGATCTGATGGTTCTGAGCACCATACTATCA 2210
Db	1093	CAGATAATGGCATTCAAGGATCTAGGATCTGGPATCAGTCACAAAC	1152	2173 GCAATGCAAATTCAGAGGAGCTGGTTCTAGACTCAGACCACTATCC 2232
Qy	1131	TTTATGAGCTGAGCTGAGCCATTGGAACTCTGTGATTTAAAGCTCTGATGATAAA	1190	2211 CGGAAGGATGAAAGGATCTGATCTGAGCTGAGGGAAACCTCGTTTTGTTATTC 2270
Db	1153	TTTTTCGGACCTTGGCTTGGACCTGATCAACCTGATCAACCTGACAA	1212	2233 CGCAAGGATGAGGGAGACAGAGCTGGAGAGCTTAATCTGCTCTCCTC 2292
Qy	1191	GTCACGGACTTGGCTTCTCTGATGATATTCTCATAGCCATGATCAACTAT	1250	2271 ATTTCATGGACTTGGACTTGGCTTACCCAGTTGGCTTAAGCCAGGAAG 2330
Db	1213	GTCATGGCTTGGCTTGGCTTGGCTTGGCTTGGCTTGGCTTGGCTTGGCTT	1272	2293 AACCTCCACGACCAACTTACTCTGACTACCTATCGTTGTCCTCCGGAAAG 2352
Qy	1251	ACCTGGTCTCATGGGTTGAAATGTTGTTGAGGTTGACTCTGATCACTCTGACA	1310	2331 TACAAGATAGTCCTGGATTAGATGATCCUTTGGAGCTTGGAGGCTTGGCT 2390
Db	1273	ACATCTGGTGGCTGGCTGGCTGAACTGGTGTGACTGTCATATTCACCTGATCG	1332	2353 TACAATAATCGTTTGGACTCTGATACCTTGTGATCTCTGATGAGCT 2412
Qy	1311	CGGGTCTCATGGGTTGAACTCTGGACTCTGGCTTCACTAAGGGCTGGAGGTTCTA	1370	2391 GATGGAGAGGACTCTGAGCTTGTAGGGTGTGATGATAACGGCTCTGATC 2450
Db	1333	CGGGTCTCATGGGTTGAACTCTGGCTTCACTAAGGGCTGGAGGTTCTA	1392	2413 TCCGGGGAGTTTACCTCTGATGAAAGCAGCAGATAACGGCTCTGTCCTCTG 2472
Qy	1371	AGTTTCTCTCTCAATGCAAGGTGGATGATGGTTGATGGTTCAGA	1430	2451 TACACCCATGAGACAGGAGTGGCTATGCTTATGCTTAGTGGAGATGAA 2510
Db	1393	AGTATCTCTTCACGGGATGGCTGGATGGCTGGATGGCTGGAAAGATAACAGTTGATGGTTCAGA	1452	2473 TATGGACCTGGCAGAACCGTGTAGTTACGCTGGAGTAGATGATGATGAA
Qy	1431	TTTGATGGGTTGACTCTCATGGATGTCAGTGGTACACCCATCATGGTACGGTACGGTACGGC	1490	Db US-09-938-842A-337
Db	1453	TTTGATGGGTTGACTCTCATGGATGTCAGTGGTACGGTACGGTACGGTACGGC	1512	; Sequence 337, Application US/0938842A
Qy	1491	AACTACATGAAATCTTGGATGCTGATGCTGTTTGTGTTTATGATGGT	1550	; Publication No. US20040094976A9
Db	1513	AATTACATGAACTCTGGATATTGGATCTCATGATGGTCTCATCTAATGCTG	1572	; GENERAL INFORMATION:
Qy	1551	TGAAATGATGATGTTGATGATGTTGCTGATGTTGCTGAGATGTTGAT	1610	; APPICANT: Harper, Jeff
Db	1573	GTGAAACGTTGATTGATGATGGCTTACCTGGGCTTACCTGGGCTATGTTGCTGCGGAGATGGT	1632	; APPICANT: Kress, Joel
Qy	1611	CGAATGCCAACAGTTGGATTCCGGTTGGAGATGGCTTGGCTTGGATTCTC	1670	; APPICANT: Wang, Xun
Db	1633	GGGGATGCCAGTTGGTTGGCTTGGCTGCTGAAAGCTGGCTGTTGGCTTGGCT	1692	; PRIORITY:
Qy	1671	CACATGGCTGTTGCTGATTAAGGGTTGAGATTATGAGATGAGATGGAA	1730	; PRIORITY NUMBER: 2000-05-24
Db	1693	CACATGGCTGTTGCTGATTAAGGGTTGAGATTATGAGATGAGATGGAA	1752	; PRIORITY NUMBER: 2001-01-16
Qy	1731	ATGGGTGACCTGATGATGGCTGACCAACAGGGCTGTTGAAAGAGATGGT	1790	; PRIORITY NUMBER: 2001-06-22
Db	1753	GTTGGTGTATAACTTCACGTTACGCTTACGAGGGTGGGAGAAAGATGGT	1812	; NUMBER OF SEQ ID NOS: 5379
Qy	1791	GCTGAAACTCATGACGGCCCTTGGTGTGACAAACTTGCATTTGCTGAGAC	1850	; SEQ ID NO: 337
Db	1813	GGAGAGCTCATGATGAAAGCTTGGTGTGACAAAGATGGT	1872	; LENGTH: 2577;
Qy	1851	AGGATATGATGACTCTGCTCTGACGACCATCTACTCCCTCTCATGATGTC	1910	; TYPE: DNA
Db	1873	AAGGACATGATGATGATGCTGACAGCCACTCCGGTGTGACCCGG	1932	; ORGANISM: Arabidopsis thaliana
Qy	1911	GTGAGATGGCAGAAATGATGGCTTACCATGGATTAGGGAGATGGT	1970	US-09-938-842A-337
Db	1933	ATGGCTTACACAAATGCTGGCTCATTTAGATGGATGGTGGGAGGATACCTC	1992	
Qy	1971	AATTATGGAAAATGAAATTGGACTGGCTGTTGATGGTCAAGGTTGATCT	2030	
Db	1993	AATTATGGAAAACGAAATTGGACCCGACTTCACAGGACGACCAAG 2052		
Qy			204 GTCACTGGCTCTAAAGAGTCCTCTGATGGCTGAGTAATCTCTCAACA	263
Db			144 TTTCCTAGGGGGCTCTCTGTTGGAAAGTCATCTGACTCTCTCAATGTAATG 203	
Qy			136 TCTTCGGAGGTTTGTGCTGAAAGCTCCGTCCTCTGATCTGATCTGTCCTCTAGCT 195	
Db			196 ACCATGCTCATCTGAGAAAGCTCCGGTCCGCCA--TCAGATGATGATGCTCTCATCTGCTCT 252	
Qy			264 GATCAATTGAAAGGCCCTGGCACACTTCAGAAAGATCCAGGTTACTGATGTTGAG 323	



Qy	2451	TACACACCATTGAGAACCGAGTGGCTATGGTTAGGGATGAGTGGAGATAATGAA	2510	Qy	827	TATTCCTGCTGGATCAAGPTCTCAGGCAAGGACTCCATATAATGGCAT	886
Db	2473	TATGCCACCGTGAGAACCGCTGTAGTTACGCTGCAGTAGTGTAGTGTAGAA	2532	Db	1051	CATTCTGCTGGATCAACTACTCTTACGCTTCGTGAAATTCCATATAATGGAT	1110
RESULT 13				Qy	887	ATACATGATCCTCCGGAGGAGAAGATGTTCAAAATCTCAGGCCAAAGGAGCC	946
US-10-056-454A-12	; Sequence 12, Application US/10056454A			Db	1111	ATATPATGATCCACCGAAGAGGAGGATATCTCCACACCCAGGGCTAAAGAAC	1170
GENERAL INFORMATION:				Qy	947	AAAATCACTTCGGGTTTATAGTCGCACTGGGTTAGTAGTGGAGGCTTAATCAA	1006
APPLICANT: National Starch and Chemical Investment Holding Corporation				Db	1171	AAAGTGGTGAATAATGAAATGAAATGAAATGAAATGAAATGAAATGAAAT	11230
NUMBER OF SEQUENCES: 20				Qy	1007	CACATATGCCACTTAACTAGATGAGTGGCTCCTGGCAT-CAAAAGCTGGCTACAATG	1065
CORRESPONDENCE ADDRESS:				Db	1231	CTCATAGTCAGCTCATGGTTAGAGTAGAGTGAAGTCTCTCTGATAAAAGCTGGTACAATG	1290
ADDRESSEE: National Starch and Chemical Investment Holding Corporation				Qy	1066	CTGTCAGCTCATGGTTAGAGTAGAGTGAAGTCTCTGATGGSTATCGTCA	1125
STREET: 1000 Unigema Blvd.				Db	1291	CGGTGAAATTATGGTAACTTCAGGCAATCTTATGGTAACTGGTATCTGTGCA	1350
CITY: Newcastle				Qy	1126	CAAACCTTTATGAGCAGTAACTGGCAATTGGAACCTCTGTGATGATTAACCTCTGTAA	1185
STATE: Delaware				Db	1351	CAAATTTTTGACCAAGGCGCCTTTTGGAAACCCGAGACCTTAAGTCGTTGAT	1410
COUNTRY: United States of America				Qy	1186	ATAAGCTCAGGTTAGGCTCTGTCTCATGATATTGTCATGGCATGATCAA	1245
ZIP: 19720				Db	1411	ATAAGCTCATGGCTGAAATTGTTCTCATGACAACTGTCAGGCATGGATCAA	1470
COMPUTER READABLE FORM:				Qy	1246	CTAATAGCTTGGATGGCTGAATATGGTGTAGGATGGTCACTACTTCCTCTCG	1305
MEDIUM TYPE: Floppy disk				Db	1471	ATATPACTTATGAGTGGACATGTTGACAGTGTGACGAGTGTGACTCTCTG	1530
COMPUTER: IBM PC compatible				Qy	1306	GACCGGGGCTCATATTGGATGGCACTTCGCCTTCAACTATGGAGCTGGAGG	1365
OPERATING SYSTEM: PC-DOS/MS-DOS				Db	1531	GAGCTGTGGTTATATGGATGGATTTCGGCTTAACTATGGAAACTCGGAGG	1590
SOFTWARE: Patent in Release #1.0, Version #1.3.10				Qy	1366	TTCTTAAGGTTCTCTTCAATTGAGGTGGCTTGTGATGAGTACAAGTTGTGGGT	1425
CURRENT APPLICATION DATA:				Db	1591	TACTTGGATATCTCTCCTCAATGGAGATGGTTGGATGAGTCAAATTGGTGGAT	1650
APPLICATION NUMBER: US/10/056,454A				Qy	1426	TCAGATTGGATGGGGTGAATGTCATGGTACACCCATGGTGTGAGGTTTA	1485
FILING DATE: 25-Jun-2002				Db	1651	TTAGATTGATGGTGTGACATCAATGATGTTGACTCACCGGATATTGGGATTCA	1710
INFORMATION FOR SEQ ID NO: 12:				Qy	1486	CCGGCAACTACAATGATAACTTGGATATGGTCACTGTTGTTGTTGTTGTA	1545
SEQUENCE CHARACTERISTICS:				Db	1711	CTGGAAACTAGGAAATCTGGACTCCAACTGATGTTGATGTTGTTGTTGTA	1770
LENGTH: 3003 base pairs				Qy	1546	TGCTGTTGATGATGATGATGATGATGATGATGATGATGATGATGATGATG	1605
TYPE: nucleic acid				Db	1771	TGCTGCTCAAGATCTTATTCATGGCCTTTCGGAGATTCACCATGTTGAGATG	1830
STRANDEDNESS: single				Qy	1606	TTAGGGAATGCCACAGTTGATGGTGGTTGAGATGTTGGTTGGTTGATTC	1665
TOPOLOGY: linear				Db	1831	TTAGGGAAATGCCGACATTGGTGGTTCAAGATGCCGACATTGGTGGTTGATC	1890
SEQUENCE DESCRIPTION: SEQ ID NO: 12:				Qy	1666	GTCTCCACATGGCTTGTGCTGATTAATGGCTGATTAATGGCTGATTAATGG	1725
us-10-056-454A-12				Db	1891	GGCTGATATGGCAATGGCAATGGTGTGATATGGTGTGATATGGTGTGAT	1950
Query Match	52.5%	Score 1357.8; DB 15; Length 3003;		Qy	1726	GGAAATGGGTGACATTGACATATGGCTGACAACTTGGCTGTTGGAAAAAGCTGTGTT	1785
Best Local Similarity 76.3%; Pred. No. 0;				Db	1951	GGAGCTGGGGTGAATGGTGGCTGAAAGTGGATGTTGGCTGAAAGTGTGTT	2010
Matches 1682; Conservative 0; Mismatches 522; Indels 1; Gaps 1;				Qy	1786	CTTAGCTGAAAGTGTGACTCTGGCTGTTGGTGAACAAACTTGGCTGTTGGCTG	1845
Qy	347	TGTGAACTGAGTAAATAAAGAAATCTGTCAAATGCCGAGACATGTCATCGAAA	406	Db	2011	CATGGCTGAAAGTGTGACATCAATGATGTTGCTGAACTTGGCTGCTG	2070
Db	571	TGCTAAACTGGAGGAGTCTAAACATTAATGACTCTGAAAGACATATTGTAATC	630	Qy	1797	AAATCCCGGAAATGGCTGAAAGTGTGACTCTGGCTGTTGGTGAACAAAGATTC	1905
Qy	407	AATTGGATCTAAACCAAGGTCCATTCTCACCCGGAGAGGGAAAGATAATGACAT	466	Db	2071	TGGACAGGATATGGCTGAACTTGGCTGTTGGTGAACAAACTTGGCTGTTGGCTG	2130
Db	631	TGATAGGATCAGAGGGCATCCCTCCACCTGGACATTGCAAGATTGAAAT	690	Qy	2072	TTGGCTGAAAGTGTGACTCTGGCTGTTGGTGAACAAACTTGGCTGTTGGCTG	2130
Qy	467	AGATCCAACTGCTGACGGCTTGTCAACACCTGATTACGGTATTCAAGTAAAG	526	Db	2073	TTGGCTGAAAGTGTGACTCTGGCTGTTGGTGAACAAACTTGGCTGTTGGCTG	2130
Db	691	AGACCCCCCTTGACAAACTATGTCGACACCTTGATTACGGTATTCAAGTAAAG	750	Qy	2074	TTGGCTGAAAGTGTGACTCTGGCTGTTGGTGAACAAACTTGGCTGTTGGCTG	2130
Qy	527	ACTCCGAGAAGAAATTGCAAGTGAAGTGTGGCTGATGATTCCTGGCTATGA	586	Db	2075	TTGGCTGAAAGTGTGACTCTGGCTGTTGGTGAACAAACTTGGCTGTTGGCTG	2130
Db	751	ACTGAGGAGGCAATTGCAAGTGAAGTGTGGCTGTTGGTGAAGTTTCTGGTATGA	810	Qy	2076	TTGGCTGAAAGTGTGACTCTGGCTGTTGGTGAACAAACTTGGCTGTTGGCTG	2130
Qy	587	AAAGTTGGTTCTCAGCAGTGAACAGGAAATAACTTATGAGACTGGGCCACAGGAGC	646	Db	2077	TTGGCTGAAAGTGTGACTCTGGCTGTTGGTGAACAAACTTGGCTGTTGGCTG	2130
Db	811	AAAATGGGTTCACCTGCTAGTCGCTGTTACCTGGPATCCTACCTGGCTGTCG	870	Qy	2078	TTGGCTGAAAGTGTGACTCTGGCTGTTGGTGAACAAACTTGGCTGTTGGCTG	2130
Qy	647	TACGTGGCTGCAATTGATGGAGATTTCAATTAATGAGATGTCATGAC	706	Db	2079	TTGGCTGAAAGTGTGACTCTGGCTGTTGGTGAACAAACTTGGCTGTTGGCTG	2130
Db	871	CCAGTCAGCTGGCTCATGGGATTTCACATGGACCCAAATGCTGACTTGTGAC	930	Qy	2080	TTGGCTGAAAGTGTGACTCTGGCTGTTGGTGAACAAACTTGGCTGTTGGCTG	2130
Qy	707	TCGAATGAGTGTGGCTGAGTGGAGATTCCTGGCAATGAGATGTTCAACCC	766	Db	2081	CATGGCTGAAAGTGTGACATCAATGATGTTGCTGAACTTGGCTGCTG	2130
Db	931	TGGAAATGATTGGTGTGAGGATTTCCTGGCAATTGAGTGTGAAATATGGTGTG	990	Qy	2082	TTGGCTGAAAGTGTGACTCTGGCTGTTGGTGAACAAACTTGGCTGTTGGCTG	2130
Qy	767	AAATCCCGGAAATGGCTGAGTAAAGATAAGTGGCATGGATACTCTGGCAACAAAGATTC	826	Db	2083	TTGGCTGAAAGTGTGACTCTGGCTGTTGGTGAACAAACTTGGCTGTTGGCTG	2130
Db	991	AATTCCCTGATGAGTGTGGCTGAGTAACTGGTCAACATCATTTGGCTGCTG	1050	Qy	2084	TTGGCTGAAAGTGTGACTCTGGCTGTTGGTGAACAAACTTGGCTGTTGGCTG	2130
Qy	2085	TTGGCTGAAAGTGTGACTCTGGCTGTTGGTGAACAAACTTGGCTGTTGGCTG	2130	Db	2085	TTGGCTGAAAGTGTGACTCTGGCTGTTGGTGAACAAACTTGGCTGTTGGCTG	2130

RESULT 14  
 US-10-056-45A-13  
 Sequence 13, Application US/10056454A  
 Publication No. US20030166919A1

GENERAL INFORMATION:  
 APPLICANT: National Starch and Chemical Investment Holding Corporation  
 TITLE OF INVENTION: Improvements in or Relating to Plant Starch Composition  
 NUMBER OF SEQUENCES: 20  
 CORRESPONDENCE ADDRESS:  
 ADDRESSEE: National Starch and Chemical Investment Holding Corporation  
 STREET: 1000 Unigema Blvd.  
 CITY: Newcastle  
 STATE: Delaware  
 ZIP: 19720

COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy disk  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: PatentIn Release #1.0, Version #1.30  
 CURRENT APPLICATION DATA:  
 APPLICATION NUMBER: US/10/056,454A  
 FILING DATE: 25-Jun-2002  
 INFORMATION FOR SEQ ID NO: 13:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 2975 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: Single

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Qy 1906 GTGGAGTAGCATTGCAAAATGATCAGCTTATTACCATGGGATTAGCCGGAGGGAT 1965  
 Db 2131 GTGGGATGCGATTACAGATGTTAGGTGACTTCGGATTAGGGAGGGT 2190

Qy 1966 ATTGGAATTATGGAAATGATTGGACACCCCCAGTTGATTTCAGGGTG 2025  
 Db 2191 ACCTAACATTATGGAAATGATTGGCCACCCCTGAGGGATTGAGGTG 2250

Qy 2026 ATCTACATCTCCAGTGAAATTGTTCTGGAAACAAATTACAGTTATGATAATGCC 2085  
 Db 2251 AACAAACCTCTCTGTGGTCAGTAATTCCAGAAACAAATTCTGTTATGCA 2310

Qy 2086 GCGTAGGTTGATCTAGCAATTCAAGCATCTGAGATATCATGAAATCAGGTTG 2145  
 Db 2311 GACGGAGATGTTGACCCGGAGATGGCAAACTTAAAGTACCGTTG 2370

Qy 2146 ATCAAGGAAATTAGCATCTTGAGAAGGCATGGTTCTATGACTCTGAGATGGTCA 2205  
 Db 2371 ACCGGGTATGAGATCTGAGATAAATATGAGTTAGCTCAGAACCGTTCA 2430

Qy 2206 TATCACGGAGGATGAAAGGATCGGATCATGGCTCAGAGGGAAACCTCCTTTG 2265  
 Db 2431 TATCACCAAAGGATGAGGAGATGAGGAGATGATTGATTGAAAGA 2490

Qy 2266 TATTCAATTTCATGGCATCTGGATTACAGCTTGGCTTAAGCCAG 2325  
 Db 2491 TCTTTTATTTCATGCTGAAAGGTTTACGATCTGAGATGGCTGAGGCC 2550

Qy 2326 GAAAGTCAAGATAAGTGTGGATTCTGAGTATGATCCTGGCAAGGCTTA 2385  
 Db 2551 GAAAAATAAGTTGGCTTGACTCAGATGATCCACTTTGGTGGCTTGGGAGATG 2610

Qy 2386 GTCATGATGCGAGGACTTCAGCTTGAAGGGCTGAGATAACGGCCTCTCA 2445  
 Db 2611 ATCATATGCCAATATTCTACCTTGAGGATGGTATGATCTCGTTCAATT 2670

Qy 2446 TGTTGTAACACCATGTAAGCAGCTGGCTATGCTTGTAGTAGTAAAG 2505  
 Db 2671 TGTTGTAACACCATGTAAGCAGCTGGCTATGCTTGTAGTAGTAAAG 2730

Qy 2506 ATGAAATTGAACTCTGGCTTAAAGATAATCTAACACAGG 2550  
 Db 2731 AAGAAGAAGAATGCGATTAGTAGAAGTAGTAGTAGAAGAAG 2775

Qy ; TOPOLOGY: linear  
 SEQUENCE DESCRIPTION: SEQ ID NO: 13:  
 US-10-056-45A-13

Query Match Score 1341.2;  
 Best Local Similarity 76.7%; Pred. No. 0;  
 Matches 1665; Conservative 0; Mismatches 503; Indels 2; Gaps 2;

Qy 347 TGTGAGATGAAAGTAAATAAGAATCTGGTCCAATGGGGAGACAGTTAGCATGAGAA 406  
 Db 573 TGGPAAACTGGAGGAGTCATAAACTTAAACTCTGAGAGAAATTGATGAATC 632

Qy 407 AATTCGATCTAACAAAGTCCATTCTCCACCCGGCAAGGGCAAGAAATATGACAT 466  
 Db 633 TGATGGATCAGAGAGGGGGATCTGACTCTCCACCTGACTTGGTCAAGAGATTTGAAAT 692

Qy 467 AGATCCAAGGTTGAGAGGTTCTCAACACCTGAGATTACCGTTACAGTACAAAG 526  
 Db 693 AGACCCCTTGTGAAAAACTATCTCAACACCTGTTACAGGTATCAGTACAGRA 752

Qy 527 ACTCCGAGAGAAATTGACAAGTATGAAAGGTAGTAACTGGTGTGCTATCA 586  
 Db 753 ACTGGGGAGGCAATTGAGAAGTATGAGGTTGAGGTGTTGAAAGC-TTTCCTCGTGTGTTGAGC 811

Qy 587 AATGGTTGGTTCTOACCGAGTAAACAGAAATTACCTATAGAGTGGTGGCACCAGGGAC 646  
 Db 812 AAAAATGGGTTTCACTCGPAGTGTACAGGTATCATTCACCTGGTGGCTCTGGTC 871

Qy 647 TACGGGGCTGCAATTGAGATTTCATAACTGGATCTTAAGAGATGTCATGAC 706  
 Db 872 CCAGTCAGCTGCCCTCATGGAGTTCAACAAATTGGAGCCTAAATGTCGACATTATGAC 931

Qy 707 TCAGATGAGTGGTTCTGAGGAGATCTTTCGGAGATAATGAGATGGTTCAACCAAC 766  
 Db 932 TCGGATGATTGGTTCTGAGTAAAGGATAGCGATGATCTCCAGTGGTCAATT 991

Qy 767 AATTCGCCATGGTTCTCAGTAAAGGATAGCGATGATCTCCAGTGGTCAACAAAGGATC 826  
 Db 992 AATTCCTCATGGCTCAGGTGAGATACTGAGATGATGGTTAAGGATTC 1051

Qy 827 TATTCTCTGGATGTTAGTGGATGTTAGTGGCTTAACTCCATATAATGGCAT 886  
 Db 1052 CATTCTCTGGTGGATCAACTACTCTTACGCTCTGATGAAATTCCATATAATGGAT 1111

Qy 887 ATACATGATCCTCCAGGAGGAGGAGGAGGAGGAGGAGGTTAGTGGTCAAAAATCTCAGCCAAAGAGACC 946  
 Db 1112 ATATATGATCCTACCCGAGGAGGAGGAGGAGGAGGTTAGTGGTCAACCCAGGCCAANAGAAC 1171

Qy 947 AAAATCATTCTGGATTATGAGTCGGCACTTGGATGACTAGCGGCCAGTAAATT 1006  
 Db 1172 AAAGTGGCTGAGATAATGAGTAACTCATATTGGATGAGTGGTCACTTGGATGTCAC 1221

Qy 1007 CACATATGCCAACTTCTGGATGTTAGTGGCTTCCCTGGCATAAAAGGCTGGTACAAATG 1066  
 Db 1232 CTCTCATAGCTGCTTCAACTACTCTTACGCTCTGGTGGTCAATGTC 1291

Qy 1067 TGTGAGCTCATGGTATTCAAGAGCATCTCATATTATGCTAGTTGGTATCAGCTCAC 1126  
 Db 1292 GCTGGAAATTGGCTTCAAGAGCATCTTATTATGCTAGTTGGTATCAGCTCAC 1351

Qy 1127 AAACCTTATGCGCTTCTGGATGTTAGTGGCTTAAACTCTCTTAATAAGA 1186  
 Db 1352 AAATTCTTGGCATCAAGAGGCCCTTGGAAACGCCGAGACTTAAGTCTGGATG 1411

Qy 1187 TAAACTCAGCAGTGGCTTCTGGCTTCTGGATGTTAGTGGCTTAAACTCTCTGG 1246  
 Db 1412 TAAACTCTGAGCTGAGATTGTTGCTCATGGCTCATGGCTCATGCAAA 1471

Qy 1247 TAATCTGGTGGCTGCTGAGATGTTGAGCTGAGCTTCACTACTTCACTCTGG 1306  
 Db 1472 TAATACTTGTAGTGGACTGAGATGTTGAGCTGAGCTTCACTCTGG 1531

Qy 1307 ACCACGGGGTCACTATTGGATGTTGAGCTCTCGCCTTCAACTATGGAGCTGGAGGT 1366

Db	1532	ACCTCGTGTATCATGGATGGATTTCGCAACTGGAAACTATGGAACTGGGGT 1590	Db	2611	TCATAATGCCGAATTTGACCTCTGAAGGATCGTATGATGTCCTTGTCATTAT 2670
Qy	1367	TCTAAGGTTCTCCTCCTAACATGCAAGGTGGCTTGAGTAGTACAAGTTGATGGTT 1426	Qy	2447	GGTGTACACCCATCTGAAACAGGAGTGGGCTCTATGCTTATAGTGGGGGAACTGGAGAA 2506
Db	1591	ACCTTAGTATCTCTCTCAATGCGACATGGGTTGAGTAAATTGATGATT 1650	Db	2671	GGTGTAGCACCTAGTAGACAGCTATGAGCTTATGATGAGCTATGAGAACTAGAAGTAGGC 2730
Qy	1427	CAGATTGATGGGTGACTTCATGATGTAACCCATCATGGATGAGTATTAC 1486	Qy	2507	TGAATGGAA 2516
Db	1651	TAGATTGATGGTGTGATCHATGATGTTAACTGACCCGGATTATCGGGATTAC 1710	Db	2731	AGTACTAGAA 2740
Qy	1487	CGGCAACTACATGAATACTTGGATPATGCAACTGATGTTATTGAT 1546			RESULT 15
Db	1711	TGGGAATACGGGAATACCTGGACTCCTGAACTGATGTT 1770			US-10-437-963-11896
Qy	1547	GCTGTTGAATGATGATGATGATGATGATGCTGCACTTGTGAGATGT 1606			; Sequence 11896, Application US/10437963
Db	1771	GCTGGTCAACGATCTPATCATAGGCTTTCAGATCAATTACATGAGATGT 1830			; Publication No. US20040123343A1
Qy	1607	TAGTGGATGCCAACAGTTGCACTCGGTGAGATGTTGAGTGGTTGATTATCG 1666			; GENERAL INFORMATION:
Db	1831	TAGCGGATGGGACATTTGTGTTATCCGCTCAAGTGGGGTGTGACTATCG 1890			; APPLICANT: La Rosa, Thomas J.
Qy	1667	TCTCCACATGGTGTGCTGATAATGGTGTGAGATTAGAGAGATG 1726			; APPLICANT: Kovalic, David K.
Db	1891	GCTGCATATGGCAATTGCTGATAATGGATGAGTGGATTGAGATG 1950			; APPLICANT: Zhou, Yihua
Qy	1727	GAAATGGGATGGGACATTTGTGTTATCCGCTCAAGTGGGGTGTCTC 1786			; APPLICANT: Cao, Yongwei
Db	1951	GRAGTGGGTGATATTGTCTACACTGACAATAGAATGGTGTCTC 2010			; APPLICANT: Wu, Wei
Qy	1787	TATGCTGAACTCATGCCGGCTTGTGTTGACAACACTATGCAATTGCTGAT 1846			; APPLICANT: Boukharov, Andrey A.
Db	2011	ATACGCTGAACTCATGATGCTCTAGCTCAAGCATCTACCTCTCATAGATCG 2070			; APPLICANT: Barzak, Brad
Qy	1847	GGCACACGATATGTATGAACTCATGCCGGCTTGTGTTGACAACACTATGCAATTGCTGAT 1906			; APPLICANT: Li, Ping
Db	2071	GGACACGATATGTATGTTATGGCTCTGATAGACGCCAACATCATTAATAGATCG 2130			; TITLE OF INVENTION: Rice Nucleic Acid Molecules and Other Molecules Associated With
Qy	1907	TGGAGTAGCATGGCACAATTGATCAGGCTTATTACATGGATTAAGGGAGGATA 1966			; FILE REFERENCE: 38-21(5321)B
Db	2131	TGGATAGCATGGCACAATTGAGCTTATTACCTGTAATAGGCTGAAAGGGGTA 2190			; CURRENT APPLICATION NUMBER: US/10/437,963
Qy	1967	TTGAAATTATGGAAATTGATTGAGCACCCGAGTGGATTGATTTCAAGGGTGA 2026			; CURRENT FILING DATE: 2003-05-14
Db	2191	CCTAAATTCTAGGAAATTGAACTTCGCACTCTGTTGATTGATTCGGCTGA 2250			; NUMBER OF SEQ ID NOS: 204966
Qy	2027	TCTACATCTCCCTGAGTGAATTGTTCTGGACAAATTACAGTTGATAATTGCG 2086			; SEQ ID NO: 11896
Db	2251	GCCACACCTTCTGATGCTCTGAAATTCCGGAAACCAATTCTGATTAATTGAG 2310			; LENGTH: 3119
Qy	2087	GGTAGCTTGTGATCTGAGCTTCAAGGATGAGACTTCTGAGTGGCTTCAAG 2146			; TYPE: DNA
Db	2311	ACGGAGATTGACCTGGAGATGAGTAGGATGAGATTAATTGAGATTGAGTTGA 2370			; ORGANISM: Oryza sativa
Qy	2147	TCAAGGAAATTGCACTCTGAGAAAGCCTATGGTTCATGACTTCTGAGCCAACT 2206			; FEATURE:
Db	2371	CTGGGTATGCCGATTTGAGATAATTGAGTTTCAAGAACCCACTTCAT 2430			; OTHER INFORMATION: Clone ID: PAT_MRT4530_18076C.1
Qy	2207	ATCACGGAGGATGAAAGGGATGGATGCTGAGGGAAAACCTCGTTTGT 2266			US-10-437-963-11896
Db	2431	ATCACGAAAGGATGAAAGGAGTAGGATGAGTAGGATGATGTTGAGGAAACCT 2490			
Qy	2267	ATTCAATTCTCATGGACTTACCGACTTACGAGCTATGCTGAGCTTACGATGTTG 2326			
Db	2491	CTTAAATTCTCATGCAAAATTGAGTATGCTGAGCTTACGATGTTGAGCTGG 2550			
Qy	2327	AAGTACAGAATAGCTTGGATTCACTGATGATCCTTGTGAGGCTTGGCAGCTAG 2386			
Db	2551	AAAATACAAGGTTGTTGGACTTCAAGTGCACACTCCCATATAATGGCATATACTATGAT 2610			
Qy	2387	TCATGATCAGAGCACTTACGTTGAGGGTGTGACATAACCGCCCTGATCCTTCAT 2446			
Db	267	TGGATCAAGTACTCTGTGAGGGCCAGGAAATTGGAAATTCGAACTTCCATACATGGAAATTTATGAT 1006			
			Query Match	50..5%	Score 1307..6;
			Best Local Similarity	76..8%	Pred. No. 0;
			Matches	0	; Gaps 0;
			Conservative	0	; Missmatches 484;
					Indels 0;
			417	AAACCAAGGTTCCATTCTCCACCGGGCAGAGGGCAAAAGAAATAATGACATAGTCACAAGC 476	
			527	AAACCAAGGTTGTCACCAACAGAGATGGCAAAATAATTCTAGATGGACTCTDANG 586	
			477	TTGACAGGCTTCTGTCACACCTGATTACCGTTATTCACTGAGACTCCGAGAA 536	
			587	CTTAAATGGCTATAAGTACCATCTGAAATATGCAATAATGGAGACTCGTC 646	
			537	GAAATGACAGATGAACTGAGTAGTGTGATGCAATTCTGTTGAGCTTGTGGCTATGAAAGTTGGT 596	
			647	GACATGATCAGTGTGAAAGGGAGACTGGAAACATTCTCGCGGTATAGAACTTTGGA 706	
			597	TTCACGCGTGTGGAGATCTGAACTGAGTGGCTTCTGAGTGGCTTCTGGCTACCCAT 656	
			707	TTAATCACAGTGTGAACTGAGATAATTGAGATGGCTACATTCGAAATCTGCA 766	
			657	GCATTGATGTTGGAGATTCTCAATAACTGGAACTCCTTAATGCAAGATGTCATGACTCAGAATGAG 716	
			767	GCATTGATGTTGGACTCTCAACATTGGAACTTCAATGCAAAATGAGCCTGTC 826	
			717	TGTGTTGTTGGAGATCTGCTTCTGAACTGAGTGGCTTCTGAGTGGCTTCTGTC 776	
			827	TTCGGTGTGTTGGAGATCTGCTTCTGAACTGAGTGGCTTCTGAGTGGCTTCTGTC 886	
			887	GGTACGTGTAAGTGGCAAACTCCATTCTGTTGAGTAAAGGATCTTCTGTC 946	
			837	TGGATCAAGTACTCTGTGAGGGTGTGACACTCCCATATAATGGCATATACTATGAT 896	
			947	TGGATCAAGTACTCTGTGAGGGTGTGACACTCCCATATAATGGCATATACTATGAT 1006	

897	CCTCCCGAGGAGGAAGTATGTGTTCAAAATTCTCAGCCAAGAGACCAAATTACTT	956	Qy
1007	CCCTCTAGAGGGAAAGTAATTCAGCATCTCAACTAAAAGGCCAAGTCATG	1066	Db
957	CGGATTATGAGCGCACCTGGATTGACTATGACGGACCGTAACTTACACATATGCC	1016	Qy
1067	CGGATATAGGAAACTCATCTGGATTGACTAGACGGCCAAAGATCACGTATGCA	1126	Qy
1017	AACCTTAGAGATGATGTTGCTTCGATCAAAGCTGATGACATCGAGTCATA	1076	Db
1127	RACCTTGGATGAGCTTCAAGGATTCATTTATGCTTCAAGATTCAGTCAGTCATA	1186	Qy
1077	ATGCTTATTCAGAGGATTCATTTATGCTAGTTTGCTTATCACGTCACAACCTTTAT	1136	Db
1187	ATGCGAACATTCAGGCGATCCATTTATGCTGACCTTCAGTCACAATTTCTTT	1246	Qy
1137	GCGCTAGGCCATTGGAACTCTGTGATGTTAACTTACAGTAAAGCTAC	1196	Db
1247	GCACCAAGTAGTCGCTTTTCGGACCCCCAGAAAGTTAAATCTCTGATGATAAGCTAT	1306	Qy
1197	GAGTTAGGCTCTCTGTTCATGATAATTGTCTAGGCAATGATCAACTAAATAGFTG	1256	Db
1307	GAGTTGGTTTATGTTGCTCAGGATTTGCTGATGTTCAAGGTTCAATAATACCTA	1366	Qy
1257	GATGGGCTGATAATGTTGATGGTACGGATGGTCACTTTCACTCTCGACCCAGGGGT	1316	Db
1367	GATGGGTTGAAACGCTTGTGATGTTGATGATACTTCATAGTGTGTCACGGCGC	1426	Qy
1317	CATCATTCGCTGGGACTCTGGCTTTCAACTATGGGCTGGGAGTCTCAAGGTT	1376	Db
1427	CATCATGGATGTTGGGATTCGCTTCAACTATGGGAAATGGGAACTCTPAAGATT	1486	Qy
1377	CITCTTTCAATGCAAGGTGTTGATGGTCAACCTCATGGGTTCAAGTTGAT	1436	Db
1487	CTTACTTCCATTGCAAGTCAACTCATGGGTTCAAGTACAGTAGATTAAGGGAACCTAC	1546	Qy
1437	GGGGTGACTCTCAATGATGTAACCCATCATGGATTGCAAGCTTACGGGAACCTAC	1496	Qy
1547	GGGTGACCTCAATGATGTAACCTCATGGGTTCAAGTACAGTAGATTAAGGGAACCTAC	1606	Qy
1497	AATGAAATACCTTGGATATGCAACTCTGATGATACTGCTGTTTATTGATGCGTTGAT	1556	Qy
1607	AGTGAATACTTGGATTCCTCACTGATGTTGATGTTACTTGATGTTGTAAT	1666	Qy
1557	GATGATGATTCAATGGTCTCTCCAGGGGTGCAACATTGTTGAGATGTTAGTGGGATG	1616	Qy
1667	GATTAATTTGCACTTGTGAGTTTCTTGAGGGTGTACCTTGTTGAGATGTTAGTGGGATG	1726	Qy
1617	CCACAGGTGCACTTCGGGTGAGATGTTGGTGTGTTGTTGTTGTTGATGCTCACTG	1676	Qy
1727	CTTACATTGGCCFICCTGTCAGATGGGGTTGTTGTTGTTGTTGATGCTTCATATG	1786	Qy
1677	GCTGGTTGCAATAATGGTTGAGATTATTCAAGAGAGATGAAATGGGAT	1736	Qy
1787	GCTGTTCCCTACAAATGGTGAACCTCAAGCAAAAGTGATGATCITGGAAATGGGT	1846	Qy
1737	GACATTGTAATGCTGCAAGGGGTGGTGGAAAGATGTTGTTCTTATGCTGA	1796	Qy
1847	GATATTGTCGACACACTGATCAAGAAAGTGTGTTGTTGTTGATGCTGA	1906	Qy
1797	AGTCATGACCAAGGCCCTTGTTGGTCAAAACTATTGCAATTGTTGGTGAAGGAT	1856	Qy
1907	AGTCATGTCAGGACTACTGTGTCAGAAACTATTGTCAGATGGGACAGGAT	1966	Qy
1857	ATGTTAGACTCTGATGGCTCTGACGACCATCTPACTCCNCTCAPAGATGTTGGAGTAGCA	1916	Qy
1967	ATGPTGTTATTGTCGCTGGAGACCCGAAACCTPAGCAATGGTGAATAGCA	2026	Qy
1917	TTCGACAAATGCACTGGCTTATPACCCTGGATTAGGGAGAGGATATTGAAATT	1976	Qy
2027	TTGCTATAAATGTTAGACTCTCAAACTGGTTAGGGAGAGGCTCTCAACTT	2086	Qy

Result No.	Score	Query	Match	Length	DB ID	Description	
1	1382.4	53.4	3074	3	US-09-087-277-1	Sequence 1, Appli	
2	1384.4	53.4	3074	4	US-09-654-499-1	Sequence 1, Appli	
3	1256.6	48.6	2220	4	US-09-731-166-11	Sequence 11, Appli	
4	1254.8	48.4	2446	4	US-09-731-166-9	Sequence 9, Appli	
5	1251.8	48.4	2665	4	US-09-257-894-1	Sequence 1, Appli	
6	1251.8	48.4	2725	3	US-09-911-44A-14	Sequence 14, Appli	
7	1245.2	48.1	2853	4	US-09-608-040-3	Sequence 3, Appli	
8	1097.4	42.4	2087	4	US-09-257-894-9	Sequence 9, Appli	
c	9	1095.4	42.3	2165	4	US-09-257-894-8	Sequence 8, Appli
10	947.4	36.6	1193	3	US-09-087-277-3	Sequence 3, Appli	
11	947.4	36.6	1193	4	US-09-654-499-3	Sequence 3, Appli	
12	633.4	24.5	2470	4	US-09-731-166-13	Sequence 13, Appli	
c	13	633.4	24.5	2487	4	US-09-257-894-19	Sequence 1, Appli
14	633.4	24.5	2565	4	US-09-257-894-24	Sequence 24, Appli	
15	633.4	24.5	2763	3	US-09-911-44A-16	Sequence 16, Appli	
16	633.4	24.5	2772	4	US-09-257-894-12	Sequence 12, Appli	
17	608.2	23.4	3128	3	US-09-716-449-1	Sequence 1, Appli	
18	587.8	22.7	2903	3	US-08-104-158-1	Sequence 1, Appli	
19	587.8	22.7	2909	4	US-09-609-040-1	Sequence 1, Appli	
20	544.8	21.1	1809	4	US-09-257-894-25	Sequence 25, Appli	
21	546.8	21.1	1865	4	US-09-257-894-20	Sequence 20, Appli	
22	369	14.3	11459	4	US-09-357-895-29	Sequence 29, Appli	
23	369	14.3	11478	3	US-08-987-803-29	Sequence 29, Appli	
24	369	14.3	11478	3	US-08-933-440-29	Sequence 29, Appli	
25	326.6	12.6	5402	4	US-09-221-01B-194	Sequence 194, Appli	
26	178.8	6.9	303	4	US-09-313-29A-6200	Sequence 620, Appli	
c	27	109.6	4.2	414	4	US-09-257-894-2	Sequence 2, Appli



**RESULT 2**  
US-09-658-499-1  
Sequence 1, Application US/09658499  
Patent No. 6169231  
GENERAL INFORMATION:  
APPLICANT: EK, Bo  
APPLICANT: LARSSON, Lars  
APPLICANT: RASK, Hakan  
TITLE OF INVENTION: STARCH BRANCHING ENZYME II OF POTATO  
FILE REFERENCE: 003300-486  
CURRENT FILING DATE: 2000-09-08  
PRIOR APPLICATION NUMBER: 09/087,277  
PRIOR FILING DATE: 1998-05-29  
PRIOR APPLICATION NUMBER: PCT/SE96/01558  
PRIOR FILING DATE: 1996-11-28  
PRIOR APPLICATION NUMBER: SE 9504272-7  
PRIOR FILING DATE: 1995-11-29  
PRIOR APPLICATION NUMBER: SE 9601506-0  
NUMBER OF SEQ ID NOS: 4  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO: 1  
LENGTH: 3074  
TYPE: DNA  
ORGANISM: Unknown  
FEATURE: Description of Unknown Organism.bell gene  
OTHER INFORMATION: (branching enzyme II) from Solanum tuberosum  
OTHER INFORMATION: (potato)

Qy 2207 ATCACGGAAAGGATGAAAGGATCGGATCATGTCGAGGGAAAACCTCGTTTGT 2266  
Db 2477 ATCACGAAAGGATGAAAGGATAGTAGTGATGTTGTATTGAAAAGCTAGTTGT 2536  
Qy 2267 ATTCAATTTCATGGACTACGCTATGGATTCGATTAACCGAGTTGGCTAAACCCAGG 2326  
Db 2537 CTTTAATTTCATGGACAAAGCTATGGATTCGACTATGGCTGAGCCCTGG 2596  
Qy 2327 AAAGTACAGATAGTCTGGATTCAAGATGATCCTTGTTCAGGCCTTGGCAGGCCCTAG 2386  
Db 2597 AAAATAAGGTTGCCTGGACTCAATTTGGTTTCGGAGATTGA 2656  
OTHER INFORMATION: Amino acid -16 is Xaa wherein Xaa = Pro.  
US-09-658-499-1

Qy 2387 TCATGATGAGGACTTCAGCCTTGAAGGGTGTACGATAACCGSCCTCGATCCTTCAT 2446  
Db 2657 TCATAATGCCGATATTACCGCTTGAAGGGTGTACGATCCTGCTCGTCAATTAT 2716  
Qy 2447 GGTGTACACCATGTAAGAACGGCAGTGTCTATGGTTTACTGGGGATGAAGTCGAGAA 2506  
Db 2717 GGTGTATGCACCTAGAAGAACGGCAGTGTCTATGGACTATGACAAGAAGAAGA 2776  
Qy 2507 TGAATTGAAACCTGTCGGTTAAAGATAATCTTAACAAAGGG 2550  
Db 2777 AGAAGAGAAAGTAGCAGTAGTAAAGAGTAGTAAAGTAGTAAAGAGAG 2820

Query Match Score 1382.4; DB 4; Length 3074;  
Best Local Similarity 76.6%; Pred. No. 0;  
Matches 1689; Conservative 0; Mismatches 515; Indels 0; Gaps 0;

Qy 347 TGTTCAGATGAAAGTAATAAGATACTGTTCGAATGCGGGAGAGTAGCATAGAAA 406  
Db 617 TGGTAACCTCGGAGGTCTRAAACCTTAATACTCTGAGAGAACATTATGGTAAATC 676

Qy 407 AATTGCGATCTAACCGTCCATTCTCAACCCGGCAGAGGGAAAGATAATATGACAT 466  
Db 677 TGATGGGATCTGGAGGGCATCTCCACCTGACATGGTCAAGATTAGAAAT 736

Qy 467 AGATCCAAGCTTGAAGGGCTTCGTCACACCTGAGATTACCGGTTACAGTACAAAG 526  
Db 737 AGACCCCCCTTTGACAAACTATCGTCAACACCCCTGATTACAGGTTACAGTACAGAA 796

Qy 527 ACTCCGGAGAGAAATTGAGAAGTGAAGTGAAGTGTGGATGCAATTCTCGTGGTTATGA 586  
Db 797 ACTGGGGAGGCCATTGAGAAGTGAAGTGAAGTGAAGTGAAGTGGTTGGAGCTTTTC 856

Qy 587 AAGGTGGTGTTCGACGCGATGAAACAGGAAATACCTTATAGAGGTGTGGCAATTCT 646  
Db 857 AAAAATGGGTTTCACTCGTAGTGTCAAGETATCTCCGTTACGTTACGTTACG 916

Qy 647 TACGGGGCTGCATTGAGGATTCATAACTGGAAATCCTTAATGCGAGATGTCATGAC 706  
Db 917 CCAGTCAGCTGCCCTCATTCGGAGATTCACAATGGTGCACATTATGAC 976

Qy 707 TCAGATGAGTTGTGGTGTCTGGAGATCTTGGGAATAATGGAGATGTTCAACCAC 766  
Db 977 TCGGATGAAATTGGTCTGGAGATTTCTGCAAAATATGGGATGTTCTCTGC 1036

Qy 767 AATTCCCATGGTTCAGAGTGGATCTCCATGGCAACAAAGATTAC 826  
Db 1037 AATTCTCATGGTTCAGAGTGGATCTCCATGGTGTAAAGGATTC 1096

Qy 827 TATTCCTGCTGGATCAAGTTCTCGTTCAAGCACAGCTGGTAACTCCATATAATGGCAT 886

Qy 887 ATACATGATCCTCCGGAGGGAGATGTGTCAAATCTCAGGAAAGAGACC 946  
Db 1157 ATATPATGATCCACCCGAGAGGAGGTTATCTCCACACCCGACGCCAAAGAAC 1216

Qy 947 AAAATCACTTCGGATTTATGAGTCACGGTGGATGAGTAGTGGCAGTAAATCAA 1006  
Db 1217 AAAGTGGCTGAGAAATATGAAATCTCATATGGATGAGTAGTGGCTAAATCAA 1276

Qy 1007 CACATATGCCAACCTAGAGATGATGTCGCTTCGGCATAAAGCTGGTACATG 1066  
Db 1277 CTCAATAGTGGTAAATTAGATGAGTTCTCGTCATAAAAGCTGGTACATG 1336

Qy 1067 TGTTCAGCTATGGTATCAAGACATCATATTGCTAGTTGGTATCAGCTCAC 1126

Db 1337 GGTGCCAAATTGGCTATGCTAGTTGGTATCATGTCAC 1396

Qy 1127 AAACTTTATGCAAGCTAGCAGCTGGATTCGGAAACTCTGTGATTAAGCTCTPATA 1186

OTHER INFORMATION: Nucleotides 92, 285, 1406, 1430, 1897 and 2156 are A, C, G or T.

Db 1397 AAATTCTTINGCACCAAGCAGCCTTGGAACNCNCCGAGCCTTAAGTCTTCATTGAC 1456

NAME/KEY: misc feature  
LOCATION: (1.89)..(2825)  
NAME/KEY: sig\_peptide  
LOCATION: (1.89)..(332)  
NAME/KEY: mat\_peptide  
LOCATION: (333)..(2825)  
NAME/KEY: misc feature  
LOCATION: (92)..(156)  
OTHER INFORMATION: Nucleotides 92, 285, 1406, 1430, 1897 and 2156 are A, C, G or T.  
NAME/KEY: misc feature  
LOCATION: (285)..(287)  
OTHER INFORMATION: Amino acid -16 is Xaa wherein Xaa = Ile, Leu, Val  
OTHER INFORMATION: or Phe.  
NAME/KEY: misc feature  
LOCATION: (1404)..(1406)

Qy	1187	TAAAGCTCACCGATTAGGCTTCCTCTGGATAATGTTCATGCCATGCAAC	1246	Db	2537	CRTTAATTTCACGTGACAAAACCTTACAGACTCCATGGCTGAGGCCCTCG	2596
Db	1457	TAAGCTCATGGCTTCAAGTGGATGTTCTCTGGATGATGATCAAA	1516	Qy	2327	AAAGTAGAAGATACTCTGGATTCAAGTATCCTTGTGCTGGCTTGCGCTTAG	2386
Qy	1247	TAATACGTGGATGGTGAATATGTTGATGGTGTCTCTGGATGATGATCAAA	1306	Db	2597	AAATAACAGGTGCTTCAACTTCTGGATGATCCACTTCTGGGAAATGTA	2656
Db	1517	TAATACCTTATGGACTGACATGGTGGACAGATAGTGTTCACCTGG	1576	Qy	2387	TCAATGCGAGGCACTTCAGCTTGAAGGGTGTACGATAACGGCTCGATCTCAT	2446
Qy	1307	ACACCGGGCTCATCATGGACTTCGGACTTCGCCCTTCACATGGAGCTGGGGT	1366	Db	2657	TCAATGCGAGGCAATTACCTTGAAGGGTGTACGATAACGGCTCGATCTCAT	2716
Db	1577	AGCTCTGGTATCATGGTGGCAATTCCGGCTCTTCAACTATGGAGCTGGGGT	1636	Qy	2447	GCTGACACCATGAGAACAGCAAGCTGGTGTCTAGCTTAGGGGGATGAACTGGAGAA	2506
Qy	1367	TCTAAGTTCTCTTCATGGTCAATTGAAAGGTCGGTGTGGTT	1426	Db	2717	GCTGACACCATGAGAACAGCAAGCTGGTGTCTAGCTTAGGGGGATGAACTGGAGAA	2776
Db	1637	ACTTGGTATCTCTCTCATGGTCAATTGAAAGGTCGGTGTGGTT	1486	Qy	2507	TGAATGGACACCTGTGGCGTTAGATAATCTAACACAGG	2550
Qy	1427	CAGATTGATGGGTGACTTCATGATGAACTCATGGTCAAGCTAGTTAAC	1696	Db	2777	AGAAAGAAGTACAGTAGAGAACTAGTAGAGAACTAGTAGAGAAAG	2820
Db	1697	TAGATGATGGTGCACATCAATGATGATACTACACGAACTGGGATTAC	1756				
Qy	1487	CGGCAACTACATGANTCTTGGATGAACTGATGATGCTGGTTTATTGAT	1516				
Db	1757	TGGGAATACAGGAAATCATTTGGACTCGCAACTGTGTGTGTCTGT	1816				
Qy	1547	GCTGTTGATGATGATGATCATGGTCTTCGGTGTGCAACATGGAGATGT	1606				
Db	1817	GCTGGTCAACGATCTTATGGTCTTGGTTTCCAGTGTAACTCTGGAGATGT	1876				
Qy	1607	TAGTGGATGGCCAACACTTCATTCGGTGTGAAAGTGGTGTGGCTTGTATTG	1666				
Db	1877	TAGGGATGGGACATTINTATCCGTCAAGTGGGGTTGGCTTGACTATCG	1936				
Qy	1667	TCTCCACATGGCTGGTGTGATAAAATGGTGTGAAATTTCAGAAGAGATGAGATTG	1726				
Db	1937	GCTGCATATGGCAATTGCTGATAATGGTGTGGTCAAGAACGGATGAGATTG	1996				
Qy	1727	CAAATGGTGTACATGTAATGTAATGTGACACAGCGGTGTTGAAAGTGTGTTG	1786				
Db	1997	GAGAGTGGTGTATATGTCATACGTGAAATAGAAGATGGTGGAAAGTGTGTTG	2056				
Qy	1787	TTATGCTGAAACTCATGACAGGCCCTTGTGGTGAACAACATTGCTGTAT	1846				
Db	2057	ATACGGTGAAGTCTGATGTCAGGCTCTAGCTGTGGTGTATAACATAGCTTCTGGCTGT	2116				
Qy	1847	GGACAAGGATATGGTATCATGGCTCTGACAGACATCTACCTCTCATGATCG	1906				
Db	2117	GGAGAGATGATGATGATGATGATGATGATGATGATGATGATGATGATG	2176				
Qy	1907	TGGAGTAGCATGGCACAAATGATCATGGCTTATTACATGGATGAGGGAGGGATA	1966				
Db	2177	TGGGATGACATGGCACAGATGGATGGCTGTAACATGGATGAGGGATA	2236				
Qy	1967	TTGAAATTATGGAAATGATTGGAACCCGAGTGTGGTCAAGAGGTGA	2026				
Db	2237	CCTAAATTCTGGAAATGATTGGCACCCTGTGGTGTGGTGTGGCTGA	2296				
Qy	2027	TCTACATCTCCGATGTTAAATTGTTCTGGAAACAATTACAGTTGATAATGCG	2086				
Db	2297	ACAAACACTCTGTGATGGCTGATGAACTTCACTGTTGATAATGCG	2356				
Qy	2087	GCGTAGTTGATCTGGCAATTCAAGCATCTGAGATACTGGATGCAAGACTTGA	2146				
Db	2357	ACGGGATTTGACCTGGAGATGGAGATAATTAAAGTACCTGGTGGAGGATTGA	2416				
Qy	2147	TCAAGGAAATTCACTGATCTGGAGGCTATGGTTCACTGAGCTTCAGTGGCTGAGGAGCTAGTGGCTGGGATGGTGGAG	2206				
Db	2417	CGGGGTATGGGTATCTGGTGTGATCTGGTGTGATAATTGAGTTTGT	2476				
Qy	2207	ATCACGGAAAGGATGAAGGGTCACTGTTGAGGAAACCTCGTTGT	2266				
Db	2477	ATCACGAAGGATGAAGGGATGAGGATGTTGAAAGGAAACCTAGTTGT	2536				
Qy	2267	ATCCAATTCTGGACTTAGGGPATTCGGATTACCGAGTTGGCTAAAGCAGG	2326				
Qy	610	AAACGGAATAACTATAGAGCTGGGACCCAGGGTACGTGGCTGCAATTGATGGAG	669				
Db	615	CGGAGGTACATGGCTCTGGCTGAGCTTTCCTGAGCTTTCCTGAGCTGGTGT	674				
Qy	670	ATTAAATACTGGATCTTAATGAGATGTTGTTGTTGTTGG	729				
Db	675	ACTGAAACACTGGATCCAATGAGATGTTGAGGAAATAATGAGTGTGTTGG	734				
Qy	730	AGATCTTGGCAGATAATGCAATGGGTCAACCAATTCCCATGGTCTCGAGTAA	789				

Db	AAATTCTGCCTAACATGAGATCTACCTTCTCATGGATCTCGTAA	794	Db	CATTAGTCGGACAGACTATTGGTTTGGTGTGAGGATATGTGATTTC	1874
Qy	790 AGATACGCTGATACTCCTACATGGCAAAAGATTCATCTGTTGGTCACTCT	849	Qy	TGGCCTTGTGACAGACATCTACTCCCTCATAGATCTGTTGGAGTAGCATGCCA	1929
Db	795 ACGTGAGATGATACTCCTACATGGGATAAAGGATTCATGGTCACTACT	854	Db	1875 TGGCCTCGTGTAGACCTTCACACTCTACATGGTCACTTGCA	1934
Qy	850 CAGTTCAAGCACCGTGAACCTCCATTAATGGATAACTATGATCTCCGAGGG	909	Qy	1930 TCAGGCTTATACCTGGATTAGCGGAGAAAGTTGAATTTATGGAAATGAA	1989
Db	855 CAGTGCAGCCCCAGGAAATACCATATGTTGGATTATTATGATCTCTGAAGGG	914	Db	1935 TTGAGCTTACACATGGTTAGBAGAGGGCTATCTAATTCATGGAAATGAGT	1994
Qy	910 AGAGATGTTGTTCAAAAATCTCAGCCAAAGACCAAACTCAGGTTATGATGTTGAA	969	Qy	1990 TTGGACACCCGAGGGATTGATTTCAGAGGATCTACATCTCCAGTAA	2049
Db	915 TAAGTATGTTGTTCAAAACGACAACTAACAGGATAATGAA	974	Db	1995 TTGGACATCTCTGAATGGATGATTTCAGAGGTCAGCTTCAAGTGTAA	2054
Qy	970 CGCACGTTGAAATGATGAGTACGAGGCAAGTAACTCCAGGAAATACCATGTTAGATG	1029	Qy	2050 TTGTCCTGGAAACATTACAGTTGATAATGGCGCTAGTTGATCTGGCAATT	2109
Db	975 CACATGTTGAAATGATGAGTACGACATAACAGATAACATGAACTTACGGATG	1034	Db	2055 TTATTGCGGAAATACAAAGTTGACAATGTCGAAAGATTGACCTGGTGATG	2114
Qy	1030 ATGTCCTCTGGCATCAAANGCTGGCTACATGTTGTCAGCTATGCTAA	1089	Qy	2110 CAAGSCATCTGAGATATCATGGAAATGCAAGAGTTGATCAAGGAAATTGAG	2169
Db	1035 AAGTCCCTCCAAGAAATAAAACTCGATAATGCAATTGCAATTCAA	1094	Db	2115 CAGACTATCTAGGATCTAGGATGTTGAGAACATGCACTCTGAGC	2174
Qy	1090 ACCATTGATAATTATGCTGTTGTTGGTATCACGGTCAAAACTTATGAGGCC	1149	Qy	2170 AACCTATGGTTCTGAGACTCTGACTGAGGATTAACGAGGATCAAGGGATC	2229
Db	1095 ACCACTGATAATTATGGAGCTTGGATAACCAGGATGAGCTTGGTAACTGATGTC	1154	Db	2175 AAAATATGAAATTCTGACATCTGTCAACAGATAATTCCGGGAAATGAGGGATA	2234
Qy	1150 GATTGCGAACTCTGTGTTGATTAAGCTCAAGGTTAGSTCTC	1209	Qy	2230 CGATCATTGCTTCGAGAGGGAAACCTCTGTTTGTATTCATTGGACTAGCA	2289
Db	1155 GTTTGTGATACCCAGAGAAATGAGCTTGGATAACCAGTGTAAATTGCGCAAGTAGTC	1214	Db	2235 AGGTGATTGTTGTCGAAAGGAGTTGGTATTGTTGTCIACTTCCACTGCAACA	2294
Qy	1210 TTGTTCTGATAATTGTTCTAGCCATCAACTAACGTTGATGGCTGATA	1269	Qy	2290 GCTATTGCGATTACCGAGTGGCTCTTAAAGCCTGGAAAGTACAGAATGTCCTGGATT	2349
Db	1215 TAGTTCTGATGATGCTTCTAGTCTGATCTGCTCACTTCTGATGGTGTAA	1274	Db	2295 GCTATTGTTGACTACGCTATTGGTTCTGAAAGCTGGGTATAAGGCTGGGTACTGGACT	2354
Qy	1270 TTGTTGATGTTAGGGTGTCACTCTGCAACCGGGCTCATCTGGATG	1329	Qy	2350 CAGAGTACCTTGTGAGCTTGTGAGCTGTTGAGGACTCTGAGT	2409
Db	1275 GTTTGATGTTAGGGTACAGATAACATTCTCACGTCAGTGTGCACTGGATG	1334	Db	2355 CCGAGCTGGACTATTGTGGATTAGCAGGATCTCATGCGACCGACCTACCG	2414
Qy	1330 GGAGCTCTGCCTTTCAACTATGGCTTCAAGGTTCTTCCTTCAATG	1389	Qy	2410 TTGAGGGTGTGACATAACGGCTTCTGATGGTAACTACACCATGTAACAG	2469
Db	1335 GGATTCTGCCTATTAACTATGGAACTGGTAAAGTTCTCTCCAAATG	1394	Db	2415 CCGACTGTGTTGCAATATAAGGCTATATTCCTGTTTACACAGCAGAACAT	2474
Qy	1390 CAAAGTGTGGTGGTGGATGAGTACAAGTTGATGGGTGACTTCAA	1449	Qy	2470 CAGTGTCTGATGCTTAGTGAG	2492
Db	1395 CTAGATGTTGGCTCGAGGAATAAGTTGATGGGTGACTTCAA	1454	Db	2475 GTGTGCTATGTCAGTGAG	2497
Qy	1450 TGATGTAACCCATCATGGATGGAGTAACTTACATGTTGACTTCAA	1509			
Db	1455 TGATGTAACCTCATCAGGATACAACTTACATGGGAACTTCATGATTTG	1514			
Qy	1510 GATATGCAACTGATGAGATGGTGTGTTTGTGATGATGTTCTGATG	1569			
Db	1515 GCTTGCACCATGATGAGTGGTGTGTTCTGATGTTCTGATGAA	1574			
Qy	1570 GTCCTCTCCAGGGCTCACCATGGTAAAGATGTTAGGGAAATGCCAACAGTTGCA	1629			
Db	1575 GACTTATCTGAGCTGTTGAGATGGTGTGTTCTGATGCTAACATTGCC	1634			
Qy	1630 TTCCGGTTGAATGGTGTGGCTTGTGATTATGCTCOCATGGCTGGTGTGATA	1689			
Db	1635 TTCCGGTACCATGGTGGTAGTTGACTGGATGCTGGCTGACA	1694			
Qy	1690 AATGGGTTGAGATTACAGAGAGATGAAATGGAAATGGTGTGACATTGACATA	1749			
Db	1695 AATGGGTTGACCTCTCAAGAAAGTGAACATGGAAATGGTGTGACATA	1754			
Qy	1750 TGCTGACCAACAGGCCTGGTGGAAAGTGTGTTCTATGCTGAAAGTCATGACCA	1809			
Db	1755 CACTGACAATAGGCTGGTTAGAGAATGTTGTAACTATGCTGAAAGTGTGACA	1814			
Qy	1810 CCCTTGTTGGTACAAACATATTGCAATTGGCTGAGGATATGACTTCA	1869			

RESULT 4

US-09-731-166-9

; Sequence 9, Application US/09731166

; Patent No. 6639126

; GENERAL INFORMATION:

; APPLICANT: Sewalt, Vincent J. H.

; ORGANISM: Zea mays

; FEATURE: Sinegatory, George W.

; TITLE OF INVENTION: Production of Modified Polysaccharides

; CURRENT APPLICATION NUMBER: US/09/731,166

; PRIORITY FILING DATE: 2000-12-06

; PRIOR APPLICATION NUMBER: 60/169,993

; PRIORITY FILING DATE: 1999-12-06

; NUMBER OF SEQ ID NOS: 16

; SOFTWARE: FastSeq for Windows Version 4.0

; SEQ ID NO: 9

; LENGTH: 2446

; TYPE: DNA

; OTHER INFORMATION: SBEIIa

; NAME/KEY: misc\_feature

; LOCATION: (0) . . (0)

; OTHER INFORMATION: Genbank Accession No. 6639126 U65948

; NAME/KEY: CDS

; LOCATION: (2) . . (2446)

US-09-731-16-6	Query Match	48.4%	Score 1251.8;	DB 4;	Length 2446;		
Best Local Similarity 75.0%; Pred. No. 0;	No. 0;	Gaps 0;	Indels 0;				
Matches 1565; Conservative 0; Mismatches 522;							
Qy	417 AAACCAAGTGCATTCCTAACCCGGCAAGAAAGATAATGACATAGATCCAAGC 476						
Db	356 AACCCAGAAGTTCCACCCACCGAGATGGCAAGGAACTGGATTGACCCATG 415						
Qy	477 TTGACAGGCTTCTGTCAAACCTTAGATTACGGTATTCACTAGAACACTCGGAA 536						
Db	416 TTGGANGGTTCTGGGTACCTTGACTACGGATACTGGATTACGTGG 475						
Qy	537 GAAATTCAAGTATGAAGTAAAGTAGTCTCGGAGCATTTCTCGGTTATGAAAGTTGT 596						
Db	476 GCTATTGATCACATGAACTGAGGTGGTTACGAAAGGTTGGA 535						
Qy	597 TTCTCAAGCAGTGAAGATACTTAATAGAGTGTGGCACCCAGGAGTACGTGGGT 656						
Db	536 TTAACTCGACGGCTGAAAGGTAACTTACGGATGCTCCCTGAGATACTCTGA 595						
Qy	657 GCATTGATGGAGATTCAATACTCGGAATCTAACTGCAATGCTCAGATGAG 716						
Db	596 GCATTAGTAGGTGACTTCACACTGGAAACCCTAACTGCTATGCTATGGCAAGAATGAG 655						
Qy	717 TGTGTGTCTGGAGATCTTTTGGCGATAATGCGATGGTTACCAACAAATTCCCCT 776						
Db	656 TACGGGGTTGGAGATTCTCTGCTTAATGCTGATGTTCCCTGTATTCCCT 715						
Qy	777 GGTTCCTGAGTAAGTACAGTGGCATGGATCTCCATGCGACAAAGATAATTCTCTGCT 836						
Db	716 GGCTCACTGTGAAAGTACAGGATGGACACCATCTGGTTAAAGATTCATTGCC 775						
Qy	837 TGGATCAAGTCTCAGTCAGGACCAAGGTAACTCCATAATAAGCATATACTGAT 896						
Db	776 TGGATCAAGTTCTGTGAGGCTTCAGGCTCCAGTGTAAATACCATACAAAGGTATATAATTGAC 835						
Qy	897 CCTCCCCGAGGGAGAAGTATGTTGTCACAAAATCTCGGAAAGACCAAAATTCACT 956						
Db	836 CCACCTGAAGGGAGAAATGTTGATCAACACCCCTAACTTAAGCGCAAGTCAGTG 895						
Qy	957 CGGATTNTGTCGACGTCGAACTCTGGAGTAACTGGAGCCTAACTACATATGCC 1016						
Db	896 CGGATATATGATTCACATGTTGGAAACTCCAGGACCTTGGATGTTGAACTATATGCT 955						
Qy	1017 AACTTGTAGATGATGTTCTCCTCCATCAAAGCTGGCTACATGTTGCTAGCTC 1076						
Db	956 AACCTCAGAGATGAGTGTCTCCANGAATTAAGCTTGTATCACATGAGTACAGATA 1015						
Qy	1077 ATGGCTATTCAAGAGGATCATATAATTGCTGATGGTTGGATCACTGTCACAAACTTTAT 1136						
Db	1016 ATGGCAATCAGGAAACCTTCACTTATTGCAAGCTTGGTACCATGTTGAAATTTT 1075						
Qy	1137 GCAGCTPAGACGCCGAACTTGGAAACTCTCTGATGATTTAAAGCTCTAACTAGATAAAGCTCAC 1196						
Db	1076 GCCCCAGTACGCCGTTGGAAACTCCAGGACCTTAACTGTTGAACTTGGATGTTGAACTTGGAT 1135						
Qy	1197 GAGTTAGGTGATGTTCTCTGTTCTATGGATAATGTTCTCATGGCATCAACTAACTAGTTG 1256						
Db	1136 GAGCTTGGCTCTGTCTAGTGTCTATGGTATGTTCATGTCATTCACTGAAATAACCTTGT 1195						
Qy	1257 GATGGTTGATGGTTGACTCTGGCCTTTCAGTGGCACGATACATTCTCACTTGTGACCAAGGGT 1316						
Db	1196 GATGGTTGATGGTTGACTCTGGCCTTTCAGTGGCACGATACATTCTCACTTGTGACCAAGGGC 1255						
Qy	1317 CATCTTGTGATGGCTGAACTCTGGCCTTTCAGTGGAGCTGGTCTAAGGTT 1376						
Db	1256 CATCTTGTGATGGCTGAACTCTGGCCTTTCAGTGGAGCTGGTCTAAGGTT 1315						
Qy	1377 CTTCCTTCAATGCGAAGGTGTTGGTGGATGAGTACAAGTTGATGGGTCAAGATTGAT 1436						
Db	1316 CTATTGTCAAATGCGAAGTGTGGCTGAAATAATTGATGGGTTCGATTGAT 1375						
Qy	1437 GGGTGACTTCAATGATGTCACCCATCATGGATTGCACGTAGATTTACCGGAACTAC 1496						
Db	1376 GGGGACCTCAATGATGATACTCACTATGGGATACAGTGACCTGGAAACTAT 1435						
Qy	1497 AATGAAATACCTTGTGGATAATGCAACTCTGATGTTGTTTATTGATGCTGTTGAT 1556						
Db	1436 GGGGGTATTGTTGGATTTGCACTGATGTTGATGCACTGTTGAAACTAAAC 1495						
Qy	1557 GATATGATTCATGGTCTTCCAGAGGCTGTCACATGGTGAAGGTTAGTGGATG 1616						
Db	1496 GATCTTATTCTGGCTTATCCAGAAGTGTATCCTGTCATGGTGAATG 1555						
Qy	1617 CCAACAGTTGCACTTCCGGTTGAGATGGTCTGGTTTGTATGTTGTCACATG 1676						
Db	1556 CCTATGTTGATCTCTTCAGATGGTTGTTGATATGGTCTCATATG 1615						
Qy	1677 GCTGTGCTGATAAAATGGGGTTGAGATTATTCAAGAGAGATGAGATGGAAATA 1736						
Db	1616 GCTGCCCCAGACAAATGGATTGAACTCTGAAAGAAACTGACGAAATGGGGT 1675						
Qy	1737 GACHTGTCATATGCTGACCAAGGGCTGGTTGGAAAAGCTGTTCTGCTGAA 1796						
Db	1676 GACATGTTGACACCTTAAACAAATAAGAAGCTGGCTTGAAAAGCTGTTCTGAA 1735						
Qy	1797 AGTCTGAACGGCCCTGTTGGTACAAACATTGATTTGGCTGATGGACAGGAT 1856						
Db	1736 ATGCTGTGATCAAGTCTCTGTTGGTACAGACATGTTCTGTTGATGGATAAGGT 1795						
Qy	1857 ATGPTAGACTTCATGGCTCTTGTGACGACCATCTACTCCCTCATAGTGTGGAGTAGCA 1916						
Db	1796 ATGTTGATTCACTGCTCTGGACAGCTTGTGAACTGCTGCACTGTTGGATAGCA 1855						
Qy	1917 TTGCAACAAATGATGACGGCTTAACTCCAGCAACGGGTTGAGGAAAGGATTTGCAATT 1976						
Db	1856 TTACATAAATGATGATTGGCTTGTCACTGGTTAGGGTGAAGGCTTAACTT 1915						
Qy	1977 ATGGGAAATGAAATTGGACACCCGAGTGGATTGATTTCCAGGGTATCTACATCT 2016						
Db	1916 ATGGCAAAATGAGGTTGGATCTCTGGATCCTGGTCACTGGCTCTCAAAAGGTCT 1975						
Qy	2037 CCCAGTGGTAATTTGTTCTGGAAACATTACAGTTATGATAAAATGGGGCTGAGTT 2026						
Db	1976 CCATGGCTCCGTOATTCTGGAAATACTAGTTGATAAAATGCGCCGTAGATT 2015						
Qy	2097 GATCPAGGCAATTCAAGGATCTGAGATACTGATGTTGAGGTTGATCAAGGAAATT 2156						
Db	2036 GACCTGGAGATGAGATTGTTGATCTGATGTTGAGCTTGGTACAGACGGAAATG 2055						
Qy	2157 CAGGTCTTGTGAGAAGCTATGCTGTTCTGACGTTCTGACGACCATACATATCAGGGAG 2216						
Db	2096 CAGCACTTGTGAGGAAAATATGATGTTCTGACATCTGATCATGTCATGTTGAGCT 2155						
Qy	2217 GATGAAGGGATGGATCTGTTGAGTCACTTGTGTTCTGAGGGAAAACCTGTTGTTGATTCATT 2276						
Db	2156 CATGGGGAGATANGGTGTCATCTTGTGAGAGATTGGTCTTGTGTCAGTCACTTC 2215						
Qy	2277 CATGGACTPAGCACTTGGATTACCTGGATTACCGGTTAAGCCAGGAAACTACAG 2336						
Db	2216 CACTGGAAATACTTGTGATCTGTTGAGCTTGGTCACTGGCTTGGAAATGACAG 2275						
Qy	2337 ATAGCTTGTGATTGAGATCCATGTCATGTTGAGCTTGTGCTGAGCTTGTGATGTCAG 2396						
Db	2276 ATCGTTTTAGATTCTGACATGGCTTGTGATCTGTTGAGCTTGGTCACTGGCT 2335						
Qy	2397 GAGCAGCTTCAAGCTTGTGAGGTTGAGGTTGAGGTTGAGGTTGAGGTTGAGGTT 2456						
Db	2336 GAGPACTTCACGCTGACTCTGGCTGTCATGTCAGCTGGCTTCTGCGCTATGTCAG 2395						
Qy	2457 CCATCTGAGACAGGAGTGGCTGTTGAGGTTGAGGTTGAGGTTGAGGTTGAGG 2503						
Db	2396 CCAAGCAGAACAGGAGTGGCTGTCATGTCAGCTGGCTTCTGCGCTATGTCAG 2442						



RESULT 6  
 US 08-941-445A-14  
 Sequence 1.4, Application US/08941445A  
 Patent No. 6,070,600  
 GENERAL INFORMATION:  
 ADDRESSEE: Greenlee, Winner and Sullivan, P.C.  
 STREET: 5370 Manhattan Circle  
 CITY: Boulder  
 STATE: CO  
 ZIP: 80103  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy diskible  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: Patent In Release #1.0, Version #1.30  
 CURRENT APPLICATION DATA:

---

Db 1733 CACTGACAATAAGGGGTAGAAAGTGTAACATATGCTAAAGTCATGTCAG 1792  
 Qy 1810 CCCTTGTGGTCAAAACATTGATTGATTGGCTGATGGACAGGATACTATGCTCA 1869  
 Db 1793 CATTAGTCGGCACAGAACATTGCGTTCTGTTGATGGCAAGGATACTATGTTCA 1852  
 Qy 1870 TGGCTTGTGACAGACCATTAACCTCTCACTACAGTGTGAGTAGCATGCACAAAATGA 1929  
 Db 1853 TGGCCCTCGTAGACCTTCAACTCTACAGTGTGAGTAGCATGCACAAAATGA 1912  
 Qy 1930 TCAGGGTTAATACCATTGGATTAGGGGAGGAGATTGAAATTATGGAAATGAT 1989  
 Db 1913 TTGACTATACAAATGGTTAGGGAGGGTATCTTAATTCATGGAAATGAT 1972  
 Qy 1990 TTGGACACCCGAGCTGGATGATTTCACAGGGTACATCTCCAGTGCTAAAT 2049  
 Db 1973 TTGGACATCTGAATGGAAACATTACAGTGTATGATAATTCGGCGTAGGTTGTCTAGCA 2032  
 Qy 2050 TTGTTCTGGAAACATTACAGTGTATGATAATTCGGCGTAGGTTGTCTAGCA 2109  
 Db 2033 TTATTGCCGGAAATACAGTGTATGACAATTCGGAAAGATTGACTCTGGTGATG 2092  
 Qy 2110 CAAAGCATCTGAGATATCATGGAATCAGAAAGTTGATCAAGCAATTTCATCTGAAG 2169  
 Db 2093 CAGACTATCTAGGATCATGTAATGGCAAGGTTGATCAAGGCAATCTTGAGC 2152  
 Qy 2170 AAGCCPATGGTTCATGACTCTGAGCACCAATACTATCACGGAAAGGTGAAACGGATC 2229  
 Db 2153 AAAATAATGAAATTCTATGACATCTGATCACCTGAACTATGAGGGATA 2212  
 Qy 2230 GGATCATTTGCTTCGAGGGAAACCTGTTTGTATTCACATTCTGGACTAGCA 2289  
 Db 2213 AGGTGATTGTGTTGAAAGGGAAUTTGATTGTTGTTGACATTCACACTGAAACA 2272  
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 Qy 2410 TTGAAGGGTGGTACGATAACGGGCTCGATCTCTGAGTCCATCACGACCCGACTTCACCG 2469  
 Db 2393 CGCACTTCTGGATGATAATGGCCATTATTCATCTGGTTTATACGACGAACT 2452  
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 Db 2453 GTGTCGTTCTGCTCCAGTG 2475

RESULT 6  
 Sequence 1.4, Application US/08941445A  
 Patent No. 6,070,600  
 NUMBER OF SEQUENCES: 37  
 CORRESPONDENCE ADDRESS:  
 APPLICANT: Keeling, Peter  
 ADDRESS: Greenlee, Winner and Sullivan, P.C.  
 STREET: 5370 Manhattan Circle  
 CITY: Boulder  
 STATE: CO  
 ZIP: 80103  
 COMPUTER READABLE FORM:  
 MEDIUM TYPE: Floppy diskible  
 COMPUTER: IBM PC compatible  
 OPERATING SYSTEM: PC-DOS/MS-DOS  
 SOFTWARE: Patent In Release #1.0, Version #1.30  
 CURRENT APPLICATION DATA:

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Db 550 ATGAGGTTAGTCGATGCAATTTCGCTGGTATGAAAGTTGTTCTCAGCAGTG 609  
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 Qy 430 TTCCUCACCCACAAAGGATGACAAAAAATTCGAGTTGACCCATGTGCAAGGTATA 489  
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 Qy 605 CGGAGGTTACATATCGAGAATGGCTCTGGACATTTCCTGAGATTGGGGTGG 664  
 Db 670 ATTGCAATACTGGATCTGATGCTGTTGATGAGTTGTTCTGTTCTGG 729  
 Db 725 AAATTCTGCTCPAACATGCAATGCACTTCACTTGTGATCTGGTGTAA 784  
 Qy 665 ACGTGACAACTGGATCAAATGGATCTGATGAGCAAATAATGAGTTGGTTGG 724  
 Qy 610 AAACAGGAATAACTTATAGAGTGGACCGAGGTTAGTGGCTGATGTTGAG 549  
 Db 605 CGGAGGTTACATATCGAGAATGGCTCTGGACATTTCCTGAGATTGGGGTGG 664  
 Qy 730 AGATGTTTGTGGATAATGCAAGTGGTTCTGGTATGAACTGGTTCTGGAGTAA 789  
 Db 725 AAATTCTGCTCPAACATGCAATGCACTTCACTTGTGATCTGGTGTAA 784  
 Qy 790 AGATGGCTGATGGATACTCATCTGGAAACAAAGATCTGGTATGAACTGGTCT 849  
 Db 785 AGGTGAGAATGGATACTCATCTGGATAATGGGTTCTGGTATGAACTGGTCT 844  
 Qy 850 CAGTTCAGGACCCAGGTTGAACTCCATAATGCAATGCACTGGTCTGGTCT 909  
 Db 845 CAGTGGAGGCCAGGAGAAATACCATGATGGGTTTATGATGGGTTCTGGTCT 904  
 Qy 910 AGAAAGTATGTTGTTGAAATCCTGCCCCAAAGGACCCAAAATCCTGGATTTATGAGT 969  
 Db 905 TAAAGTATGTTGTTGAGTGGATGCGAACCTAAACGCAAAATCATGGGATATPGAAA 964

Qy	970	CGCACGTTGGAAATGAGTGTACGGAGCCAGTAATTACAACATACTGCCAACTTACAGATG 1029	Db	2050 TTGGTCTTGGAAACATTACAGTATGATAATCGGGTAGGTTGATCTGGCAATT 2109	Qy	965	CAACATGTCGAATGGATGAGTGCAGGAAACGGATAAACACATACTGAACTTGGATG 1024	Db	2045 TTATCCAGGAAATACACAGTATGCAATTGAACTTGGATG 2104
Qy	1030	ATGTCGTTCCCGCATCAAAAAGCTGGTACAATGCTGTTAGTCACTGGTCAATTGAG 1089	Db	2110 CAAACATCTGAGATACTCATGGAAATGCAAGAGTTGATCAAGAAATTACCATCTTGAA 2162	Qy	955	TTGGACACCCCCGAGTGGATGATTTCCAGACCTGAGGTGATCTGGCAATT 2163	Db	2105 CAGACTATCTAGGATCATGGTAAAGTGAAGTGTACGGCAACATCTGAG 2164
Qy	1025	AAGTCCTCCAGAAATAACCTGGATAACAATGCAATTGCAATTCCAG 1084	Db	2105 CAGACTATCTAGGATCATGGTAAAGTGAAGTGTACGGCAACATCTGAG 2164	Qy	950	TTGGACACCCCCGAGTGGATGATTTCCAGACCTGAGGTGATCTGGCAATT 2163	Db	2105 CAGACTATCTAGGATCATGGTAAAGTGAAGTGTACGGCAACATCTGAG 2164
Qy	1090	AGCATTCAATTATGCTGTTGGTACAATGCTGAGCTTGAGCTAGGCC 1149	Db	2170 AAGCCATGGTTCTGAGACTCTGAGCCAAATACATATCACGGAGGATGAAACGGATC 2229	Qy	945	TTGGACACCCCCGAGTGGATGATTTCCAGACCTGAGGTGATCTGGCAATT 2163	Db	2165 AAAAATGAACTTGGATCATGGTAAAGTGAAGTGTACGGCAACATGGAGGATA 2224
Qy	1085	AGCATTCAATTATGCTGTTGGTACAATGCTGAGCTTGAGCTAGGCC 1149	Db	2170 AAGCCATGGTTCTGAGACTCTGAGCCAAATACATATCACGGAGGATGAAACGGATC 2229	Qy	940	TTGGACACCCCCGAGTGGATGATTTCCAGACCTGAGGTGATCTGGCAATT 2163	Db	2165 AAAAATGAACTTGGATCATGGTAAAGTGAAGTGTACGGCAACATGGAGGATA 2224
Qy	1150	GATTGAAACTCTGTGATTAAGTCTAAATAGATAAGCTGAGCTTACGGTACGGTAACTGTTGGCCAAAGT 1144	Db	2230 GGATATTGCTTCCAGCGGAAACCTCTTGTATTCATGGTAACTGGTAGGCA 2284	Qy	935	TTGGACACCCCCGAGTGGATGATTTCCAGACCTGAGGTGATCTGGCAATT 2163	Db	2225 AGGCGATTGTGTTGAAAGGGAGTTGGTGTATTTGGTGTATTCAGTCAACTCCACTGCAAAACA 2284
Qy	1145	GTGTTGGTACCCAGAGATTGAGTTGAGTGTAGATGACATGGCTGGTSC 1224	Db	2230 GGATATTGCTTCCAGCGGAAACCTCTTGTATTCATGGTAACTGGTAGGCA 2284	Qy	930	TTGGACACCCCCGAGTGGATGATTTCCAGACCTGAGGTGATCTGGCAATT 2163	Db	2225 AGGCGATTGTGTTGAAAGGGAGTTGGTGTATTTGGTGTATTCAGTCAACTCCACTGCAAAACA 2284
Qy	1210	TTGTCCTCAGCATATTGCTCATGGCATGAACTAATACCTGGTGGCTGAA 1269	Db	2285 GCTATTCGGATTACCGATGGCTCTTAAGGCCAAAGTAAAGCAGGAAAGTACAGATGTTGGATT 2344	Qy	925	TTGGACACCCCCGAGTGGATGATTTCCAGACCTGAGGTGATCTGGCAATT 2163	Db	2285 GCTATTCGGATTACCGATGGCTCTTAAGGCCAAAGTAAAGCAGGAAAGTACAGATGTTGGATT 2344
Qy	1205	TAGTCCTCATGGATTAACCTCTGGTCAAGTAACTCTGGTGAATG 1264	Db	2350 CAGATGATCCTTGTGGAGGCTTGTGGAGGTTAGTCATGATGACAGGACTCTGAGCT 2405	Qy	920	TTGGACACCCCCGAGTGGATGATTTCCAGACCTGAGGTGATCTGGCAATT 2163	Db	2345 CCGAGCGTCACTGGATTAGCGAGGATCCTACCGACACTTCACCG 2404
Qy	1270	TGTTGATGGTAGATGGTAACTACTTCACTCTGGTCACTGATGGATG 1329	Db	2410 TTGAGGGGGTGTACGATAACGGCTTGAAGGTTCTTCCTTCATAA 1389	Qy	915	TTGGACACCCCCGAGTGGATGATTTCCAGACCTGAGGTGATCTGGCAATT 2163	Db	2405 CCGAGCTGTCGCACTATACTGGCATATCATTCCTCCTCCTCAAAAG 1389
Qy	1265	GTTTGTGTTGTAAGTACATGAACTTACATGTTACAGTGGTCACTGGATG 1324	Db	2410 TTGAGGGGGTGTACGATAACGGCTTGAAGGTTCTTCCTTCATAA 1389	Qy	910	TTGGACACCCCCGAGTGGATGATTTCCAGACCTGAGGTGATCTGGCAATT 2163	Db	2405 CCGAGCTGTCGCACTATACTGGCATATCATTCCTCCTCCTCAAAAG 1389
Qy	1330	GGGACTCTGCCTTTCAACTATGGAGGTGGGAGGTTCAAGGTTCTTCCTTCATAA 1389	Db	2470 CAGTGTCTATGCTTTAGTCGAG 2492	Qy	905	TTGGACACCCCCGAGTGGATGATTTCCAGACCTGAGGTGATCTGGCAATT 2163	Db	2465 GTGTTGCTATGCTCAGTGAG 2487
Qy	1325	GGGATTCTCGCTCTGGCTATTAACTATGGAAACTCTGGAACTTAAAGTTCTCCTCCTCAAAAG 1384	Db	2470 CAGTGTCTATGCTTTAGTCGAG 2492	Qy	900	TTGGACACCCCCGAGTGGATGATTTCCAGACCTGAGGTGATCTGGCAATT 2163	Db	2465 GTGTTGCTATGCTCAGTGAG 2487
Qy	1390	CAAGTGGTGGTTGATGAACTACAGTTGAGTTGAGTAACTACATGAAATACTTG 1509	Db	RESULT 7 US-09-609-040-3	Qy	895	TTGGACACCCCCGAGTGGATGATTTCCAGACCTGAGGTGATCTGGCAATT 2163	Db	2465 GTGTTGCTATGCTCAGTGAG 2487
Qy	1385	CTAGATGGTCTCGCTCTGGAACTATAAGTTGTTGATGGTTGTGACTCTCCA 1444	Db	; Sequence 3, Application US/09609040	Qy	890	TTGGACACCCCCGAGTGGATGATTTCCAGACCTGAGGTGATCTGGCAATT 2163	Db	2465 GTGTTGCTATGCTCAGTGAG 2487
Qy	1450	TGATGTACACCCATGATGGATTGAGTAACTTACGGCAACTACATGAAATACTTG 1509	Db	; Patent No. 6570066	Qy	885	TTGGACACCCCCGAGTGGATGATTTCCAGACCTGAGGTGATCTGGCAATT 2163	Db	2465 GTGTTGCTATGCTCAGTGAG 2487
Qy	1445	TGATGTACACTCACCAGGTTGAGTAACTGGGAACTTACATGGAGATTGTT 1504	Db	; GENERAL INFORMATION:	Qy	880	TTGGACACCCCCGAGTGGATGATTTCCAGACCTGAGGTGATCTGGCAATT 2163	Db	2465 GTGTTGCTATGCTCAGTGAG 2487
Qy	1510	GATATGCAACTGTGATGATGATGCTGGTTTATTGATGCTGGTGAATGATTG 1569	Db	; APPLICANT: Willmitzer, et al.	Qy	875	TTGGACACCCCCGAGTGGATGATTTCCAGACCTGAGGTGATCTGGCAATT 2163	Db	2465 GTGTTGCTATGCTCAGTGAG 2487
Qy	1505	GCTTGTGCCACGGATGATGCTGGTTTACTTCATGCTGGTAATAGTCATAATTG 1564	Db	; TITLE OF INVENTION: NUCLEOTIDE SEQUENCES ENCODING ENZYMES THAT ALTER THE CARBOHYDRATE COMPOSITION IN PLANTS	Qy	870	TTGGACACCCCCGAGTGGATGATTTCCAGACCTGAGGTGATCTGGCAATT 2163	Db	2465 GTGTTGCTATGCTCAGTGAG 2487
Qy	1570	GTCTTCTCCAGAGGCTGTACCATTTGGTGAAGATGTTCTGGATGCCACATTG 1629	Db	; TITLE OF INVENTION: CONCENTRATION AND COMPOSITION IN PLANTS	Qy	865	TTGGACACCCCCGAGTGGATGATTTCCAGACCTGAGGTGATCTGGCAATT 2163	Db	2465 GTGTTGCTATGCTCAGTGAG 2487
Qy	1565	GACTTATCCGTGAGCTGTAACTTGTGTTACTGGATGCTCATCTTGGCC 1624	Db	; FILE REFERENCE: 514113-3515.1	Qy	860	TTCCCGTTGAGATGCTGGTTGGCTTGTATTATGTCCTCCACATGGCTGTTGCTGATA 1689	Db	2465 GTGTTGCTATGCTCAGTGAG 2487
Qy	1630	TTCCCGTTGAGATGCTGGTTGGCTTGTATTATGTCCTCCACATGGCTGTTGCTGATA 1689	Db	; CURRENT APPLICATION NUMBER: US/09/609,040	Qy	855	TTCCCGTTGAGATGCTGGTTGGCTTGTATTATGTCCTCCACATGGCTGTTGCTGATA 1689	Db	2465 GTGTTGCTATGCTCAGTGAG 2487
Qy	1625	TTCCCGTTGAGATGCTGGTTGGCTTGTATTATGTCCTCCACATGGCTGTTGCTGATA 1684	Db	; CURRENT FILING DATE: 2000-06-30	Qy	850	TTCCCGTTGAGATGCTGGTTGGCTTGTATTATGTCCTCCACATGGCTGTTGCTGATA 1684	Db	2465 GTGTTGCTATGCTCAGTGAG 2487
Qy	1690	AATGGGTTGAGATTATTCAAAGAGAGATGAAAGTGGGACATTGTCATA 1749	Db	; PRIOR APPLICATION NUMBER: PCT/EP92/00302	Qy	845	TTCCCGTTGAGATGCTGGTTGGCTTGTATTATGTCCTCCACATGGCTGTTGCTGATA 1684	Db	2465 GTGTTGCTATGCTCAGTGAG 2487
Qy	1685	AATGGTGGTACCTCTCAAGAAACTGTTGAGTAACTTGTGAGATGGGTGATTCATGGCAAA 1744	Db	; PRIORITY FILING DATE: 1992-02-11	Qy	840	TTCCCGTTGAGATGCTGGTTGGCTTGTATTATGTCCTCCACATGGCTGTTGCTGATA 1684	Db	2465 GTGTTGCTATGCTCAGTGAG 2487
Qy	1750	TGCTGACCAACAGCGCGTTGGTAGGTTGAGATGAAACTGTTGAGTAACTTG 1809	Db	; NUMBER OF SEQ ID NOS: 4	Qy	835	TTCCCGTTGAGATGCTGGTTGGCTTGTATTATGTCCTCCACATGGCTGTTGCTGATA 1684	Db	2465 GTGTTGCTATGCTCAGTGAG 2487
Qy	1745	CACTGACAAATAGGGTTGAGTGGCTTGTGAGTAACTTGTGAGTAACTTG 1804	Db	; SOFTWARE: PatentIn version 3.0	Qy	830	TTCCCGTTGAGATGCTGGTTGGCTTGTATTATGTCCTCCACATGGCTGTTGCTGATA 1684	Db	2465 GTGTTGCTATGCTCAGTGAG 2487
Qy	1810	CCCTGTGTTGGTGTGACAAAACATTATGGCAACGATATGGTACTTCATGACTTC 1869	Db	; SEQID NO: 3	Qy	825	TTCCCGTTGAGATGCTGGTTGGCTTGTATTATGTCCTCCACATGGCTGTTGCTGATA 1684	Db	2465 GTGTTGCTATGCTCAGTGAG 2487
Qy	1805	CATTAGTCGCGACAGATATTGGTTGGTGTGATGACAAGTATGTTGATTTA 1864	Db	; LENGTH: 2853	Qy	820	TTCCCGTTGAGATGCTGGTTGGCTTGTATTATGTCCTCCACATGGCTGTTGCTGATA 1684	Db	2465 GTGTTGCTATGCTCAGTGAG 2487
Qy	1870	TGGCTCTTCGACGACCATCTACTCTCTCATAGATCCTGAGTACATGGCAATT 1929	Db	; TYPE: DNA	Qy	815	TTCCCGTTGAGATGCTGGTTGGCTTGTATTATGTCCTCCACATGGCTGTTGCTGATA 1684	Db	2465 GTGTTGCTATGCTCAGTGAG 2487
Qy	1865	TGGCCCTCGATAGACCTCTCACTTGTACATGGTACGACCTTCAGATGGCAAA 1924	Db	; ORGANISM: Triticum aestivum	Qy	810	TTCCCGTTGAGATGCTGGTTGGCTTGTATTATGTCCTCCACATGGCTGTTGCTGATA 1684	Db	2465 GTGTTGCTATGCTCAGTGAG 2487
Qy	1930	TCAGGTTTAATTACATGGATTAGCGGGAGGAGATTTGAAAGTGGTGTGACATG 1989	Db	; FEATURE:	Qy	805	TTCCCGTTGAGATGCTGGTTGGCTTGTATTATGTCCTCCACATGGCTGTTGCTGATA 1684	Db	2465 GTGTTGCTATGCTCAGTGAG 2487
Qy	1925	TTAGCTTACATGGTTGAGTGGCTTGTGAGTAACTTGTGAGTAACTTG 1984	Db	; NAME/KEY: CDS	Qy	800	TTCCCGTTGAGATGCTGGTTGGCTTGTATTATGTCCTCCACATGGCTGTTGCTGATA 1684	Db	2465 GTGTTGCTATGCTCAGTGAG 2487
Qy	1900	TTGGACACCCCCGAGTGGATGATTTCCAGACGGTGTGATCTACGGTCAATT 2049	Db	; LOCATION: (313) ..(2499)	Qy	795	TTCCCGTTGAGATGCTGGTTGGCTTGTATTATGTCCTCCACATGGCTGTTGCTGATA 1684	Db	2465 GTGTTGCTATGCTCAGTGAG 2487
Qy	1985	TTGGACACCCCCGAGTGGATGATTTCCAGACGGTGTGATCTACGGTCAATT 2049	Db	; OTHER INFORMATION: BRANCHING ENZYME	Qy	790	TTCCCGTTGAGATGCTGGTTGGCTTGTATTATGTCCTCCACATGGCTGTTGCTGATA 1684	Db	2465 GTGTTGCTATGCTCAGTGAG 2487
Qy	1985	TTGGACACCCCCGAGTGGATGATTTCCAGACGGTGTGATCTACGGTCAATT 2049	Db	US-09-609-040-3	Qy	785	TTCCCGTTGAGATGCTGGTTGGCTTGTATTATGTCCTCCACATGGCTGTTGCTGATA 1684	Db	2465 GTGTTGCTATGCTCAGTGAG 2487
Qy	1985	TTGGACACCCCCGAGTGGATGATTTCCAGACGGTGTGATCTACGGTCAATT 2049	Db	Query Match : 48 1%; Score: 1245 2; DB 4; Length 2853;	Qy	780	TTCCCGTTGAGATGCTGGTTGGCTTGTATTATGTCCTCCACATGGCTGTTGCTGATA 1684	Db	2465 GTGTTGCTATGCTCAGTGAG 2487
Qy	1985	TTGGACACCCCCGAGTGGATGATTTCCAGACGGTGTGATCTACGGTCAATT 2049	Db	Best Local Similarity: 74.9%; Pred. No.: 0; Mismatches: 523; Gaps: 0;	Qy	775	TTCCCGTTGAGATGCTGGTTGGCTTGTATTATGTCCTCCACATGGCTGTTGCTGATA 1684	Db	2465 GTGTTGCTATGCTCAGTGAG 2487
Qy	1985	TTGGACACCCCCGAGTGGATGATTTCCAGACGGTGTGATCTACGGTCAATT 2049	Db	Matches: 1559;	Qy	770	TTCCCGTTGAGATGCTGGTTGGCTTGTATTATGTCCTCCACATGGCTGTTGCTGATA 1684	Db	2465 GTGTTGCTATGCTCAGTGAG 2487
Qy	1985	TTGGACACCCCCGAGTGGATGATTTCCAGACGGTGTGATCTACGGTCAATT 2049	Db	417 AAACCAAGGTTCATTCTCCACCGGAGAGGAAATATGACATAGATCCTGAGCT 476	Qy	765	TTCCCGTTGAGATGCTGGTTGGCTTGTATTATGTCCTCCACATGGCTGTTGCTGATA 1684	Db	2465 GTGTTGCTATGCTCAGTGAG 2487
Qy	1985	TTGGACACCCCCGAGTGGATGATTTCCAGACGGTGTGATCTACGGTCAATT 2049	Db	424 AAACCCGGAGTTGCTCCACGGGAAACCCAGAGATGGCTGAGCTTGTGATCTGAGT 483	Qy	760	TTCCCGTTGAGATGCTGGTTGGCTTGTATTATGTCCTCCACATGGCTGTTGCTGATA 1684	Db	2465 GTGTTGCTATGCTCAGTGAG 2487
Qy	1985	TTGGACACCCCCGAGTGGATGATTTCCAGACGGTGTGATCTACGGTCAATT 2049	Db	477 TTGACAGGCTTTCGCAACACCTGAGATTACAGTACAAAGACTCCGGATATGCTG 596	Qy	755	TTCCCGTTGAGATGCTGGTTGGCTTGTATTATGTCCTCCACATGGCTGTTGCTGATA 1684	Db	2465 GTGTTGCTATGCTCAGTGAG 2487
Qy	1985	TTGGACACCCCCGAGTGGATGATTTCCAGACGGTGTGATCTACGGTCAATT 2049	Db	484 CTGAAGATTTTCGAGCTCATGGTACTACGGTAACTGGAGAAATGGTGTGATCTG 543	Qy	750	TTCCCGTTGAGATGCTGGTTGGCTTGTATTATGTCCTCCACATGGCTGTTGCTGATA 1684	Db	2465 GTGTTGCTATGCTCAGTGAG 2487
Qy	1985	TTGGACACCCCCGAGTGGATGATTTCCAGACGGTGTGATCTACGGTCAATT 2049	Db	544 GCTATGACACCCCCGAGTGGATGATTTCCAGACGGTGTGATCTACGGTCAATT 536	Qy	745	TTCCCGTTGAGATGCTGGTTGGCTTGTATTATGTCCTCCACATGGCTGTTGCTGATA 1684	Db	2465 GTGTTGCTATGCTCAGTGAG 2487

Qy	597	TTCCTACGCACTGAACAGGATAACTTATAGAGCTGGACCAAGGACTCTGGGT	656	1677 GCTCTTGCTGATAAACTGGTTGACATTATTCAAGAGAGATGAAAGATTCGAAAATGGGT	1736	
Db	604	TTAACCGCAGTGTCAAAGGTATCACTAACCGAGATGGCTCTGGGCACTTGCA	663	1684 GCTCTTACGAGATAATGAACTGAACTCCCTCAAGGAAACTGCAATCTGGAAAATGGCC	1743	
Qy	657	GCATTCATGGAGATTCAATAACTGGAAATCCTAATGCGATGTCACTGAGT	716	1737 GACATGTCACATATGCTGACCCAAAGGGGGTGGTTGGAAAAGTGTGTTCTTATGCTGA	1796	
Db	664	GCATTAGTAGTGTCACTCAACATTGGAAATCCTAATGCGATGTCACTGAGT	723	1744 GATATGTCACACCTTAACAAATAAAAGTGGCTGAGATGTGAAAGTGTGAACTTATGCA	1803	
Qy	711	TGTGGTGTCTGGAGATCTTGGCAGATAATGCGATGTTACCCAAATTCCCCT	776	1797 AGTCATGACCGGCCCTGTTGGTACAAAACATTGCACTGATTTCGCTGATGGACAAGGAT	1856	
Db	724	TATGGTTTGGAGATTCTCCCTAACTACCGTGTGATCCTCAGTATTCCTCAT	783	1804 AGTCATGTCACAGACTACTGGGACAGACTATGCTGTTGATGGATAAGGAT	1863	
Qy	777	GTTCTCGAGTAAGATAAGCATGGATGATACTCGACAAAGATTCTATCCTGG	836	1857 ATGTTAGACTTCATGGCTCTGACACCATCTACTCCCTCTCATAGTCGAGTAGCA	1916	
Db	784	GGCTCAAGTGTAAAGATGAGATGAGATGGATGATTCATCGGTGTAAGATGTTGCT	843	1864 ATGTTAGTTTCACTGGCTCTGGATAAGCTGGCTTCAACTCCCGCATTTGCTGCA	1923	
Qy	837	TGGATCAAGGTTCTCACTTCAGCTTCAAGGCAACTCCATAATAATGGCATATACTATGAT	896	1917 TTGCAAAATGATGATAGGTTTAACTATGGGATTAGGGAGAGGATATTGATTTGTT	1976	
Db	844	TGGATCAAGGTTCTGGAGATTCTCCCTAACTACCGTGTGATCCTCAGTATTCCTCAT	903	1924 TTACATTAATGTCAGGTTGTCACCATGGGTTAGTGTGAAAGCTATCTTAACCT	1983	
Qy	897	CCTCCCGAGGGAGAGATGTTCAAAACTCTCGCAAAAGGAACTAACTCT	956	1977 ATGGAAATGAAATTGGACACCCGGAGTCGATTGATTTCCACAGGGTGTACATCTT	2036	
Db	904	CCACCTGAAAGGGAGAGATGTCCTCCAACTATCCCTCAACATGGCAAGTCACTA	963	1984 ATGCGAAATGAGTTGGGATCTCTGAACTGATGTTCCAGAGGCCACAAACTCTT	2043	
Qy	957	CGGATTATTAGTCGCACTGGATGATGAGTGTGGAACTTACATGATGCC	1016	2037 CCCAGTGTAAATTGGTCTGGAAACATTACAGTTATGATAAAATGCCCTGATGTT	2096	
Db	964	AGGATTATGATCACATGATGGAACTTACATGGAAACGGAAATAATTCTATGCT	1023	2044 CCAACGGCAAAATTCTCCGGAAATAATTGATAAAATGGCCGTPGATT	2103	
Qy	1017	AACTTTAGAGATGATGTCCTCCATCAAAAAGCTGGCTACAATGTCGTCAGCTC	1076	2097 GATCTAGGAAATTGAGATCTGAACTGTTGATCAAGGTTGATCAGCAATT	2156	
Db	1024	AATTAGGGATGGATGGTTGSCCAAGAATTAAAAGCTGGATCACATGCGATGAGATA	1083	2104 GATCTGGAGATGCAAAATTCTCTGATGAACTTCTGATGCAAGGTTGCAATG	2163	
Qy	1077	ATGGCTPATCAAGGATTCATCATPATGGCTAGTTGGPATCATGTCATGTT	1136	2157 CAGCATCTGAAAGACCTGATGGTTCTGAACTGTTGATGACTCTGACCA	2216	
Db	1084	ATGGCAATCCAGGAGCATCATCATPATGCAAGCTTGGTCACTAATTGTTT	1143	2164 CAGCATCTGAGAAAATATGGTTTATGACATCTGACCCATACTATGCGAAG	2223	
Qy	1137	GGAGCTAGACGCCATTGGAACTCTGCAATTAGCTTAAATGATAAGCTAC	1196	2217 GATGAAAGGGATCCGATCATTGTCCTTCGAGGCGAACTCTGTTGATGATGCA	2276	
Db	1144	GCACCAAGTAGCGGTTGGAACTCCAGGACTTAAATCTGATGAGCAGCAT	1203	2224 CATGGGAGATANGTGATCATCTGAAAGAGGATTTGGATTTGTTCACTTC	2283	
Qy	1197	GAGTTAGGTCTCTCTCTCATGGATTCATGCCATGCAACTAAATGCTTG	1256	2277 CATGGACTAGCAGCTATGGATTACCGAGTGGCTGTTAAAGCCAGGAAGTACAG	2336	
Db	1204	GACGGTTGAGTGGTTGAGGGCACTGATCATPATGCAAGCTTGGTCACTAATT	1263	2284 CACTCGAGCAATAGCTTGTGACTACCTGTTGACTACCTGTTGTCAGGCT	2343	
Qy	1257	GATGGCTGAAATGTTGATGGTGTGGATGTTCTCATGGCTCACTTCACCGGG	1316	2337 ATAGCTTGGATTAGATGATCCTTGTGAGGCTTGGAGCTTGTGATGCA	2396	
Db	1264	GACGGTTGAGTGGTTGAGGGCACTGATCATPATGCAAGCTTGGTCACTAATT	1323	2344 GTGGCCTTGGACTCGACGATGCTCAGCTTGTGAGGATTCAGCGGCTGTC	2403	
Qy	1317	CATCATGAGTGGAACTCTGGCTTCACTATGGACTGGGAGGTTCAAGGTT	1376	2397 GAGCCCTTCAGCTTGAAGGGTGAAGGGTGTACATACCGGCTTCATGGTACACA	2456	
Db	1324	CATCATGAGTGGAACTCTGGCTTCACTATGGACTGGGAGGTTCAAGGTT	1383	2404 GACTACTTACAAACGAAATCCCATGACAACGGCCCGCTTCTGGTGTGACT	2463	
Qy	1377	CTTCCTTCATAATGCAAGGCTGAGTCAAGGTTGAGTCAAGTTGATGTTGAT	1436	2457 CCATCTAGAACAGGCGTGGCTATGCTTGTAGTGGAGGGTGA	2498	
Db	1384	TTACITGCAAACGGAGATGGTGTGATGTTGAGATAATTGATGTTGATGTTGAT	1443	2464 CCGACGAGACTCGCTGTGATCCCTTACAGATGAACT	2505	
Qy	1437	GGGGTCACTTCATGATGTCACCCATGATGCACTGAGTTTACGGCAACTAC	1496	RESULT 8		
Db	1444	GGGGTCACTTCATGATGTCACCCATGATGCACTGAGTTTACGGCAACTAC	1503	US-09-257-894-9	Sequence 9, Application US/09257894	
Qy	1497	ATGAAATACCTTGGATGATGCACTGATGTCATGTCGTTTGTGTTGAAT	1556	Patent No. 6376749		
Db	1504	GGCGAATATTGGATTGCTACTGATGTCATGTCGTTTGTGTTGAAT	1563	GENERAL INFORMATION:		
Qy	1557	GATATGATTCATGGCTCTCCAGGCTGTCACCATGTTGAGATGTTAGTGAATG	1616	APPLICANT: Boglie, Karen B.		
Db	1564	GATCTAAATCATGGACTTATCCTGATGTCATGTCGTTGAGATGTCAGTGAATG	1623	APPLICANT: Hubbard, Theodore M.		
Qy	1617	CCACACTTGGATTCGGTTGAAGATGTCGTTGAGATGTTGATCCATCAG	1676	APPLICANT: Lightner, Jonathan E.		
Db	1624	CCTACATTTCATCCCTGTCAGTGGTGTGTTGACTACCGCTGTGAT	1683	TITLE OF INVENTION: Expression of Starch Biosynthesis		
			TITLE OF INVENTION: Enzyme Genes			
			TITLE OF INVENTION: Expression of Enzyme Genes			
			CORRESPONDENCE ADDRESS: 25			
			ADDRESSEE: E. I. du Pont de Nemours and Company			
			STREET: 1007 Market Street			



1955	TGATCCAGGAAATAACAAACGTTATGACAATGTGTCGAAGATTGCCCTGGCTTGATG	2014	Db
2110	CAAGCATCTGAGATATCGAATGCAAGAGTTGATCAGCAATTTCGATTTGAG	2169	Qy
2015	CAGACTATCTAGGTATCGTGTGATCGAAGATTGATCAGCAATTCTGAC	2074	Db
2170	AAGCCTATGTTT	2182	Qy
2075	AAAATATGATT	2087	Db
RESULT 9			
US-09-257-894-8/c			
Sequence 8, Application US/09257894			
Patent No. 6376749			
GENERAL INFORMATION:			
APPLICANT:	Broglie, Karen B.		Qy
Klein, Theodore M.			610
APPlicant No.	6376749		1573
APPLICANT:	Hubbard, Natalie L.		Db
Lightner, Jonathan E.			1513
APPLICANT No.	6376749		1513
TITLE OF INVENTION:	Starches via Modification of		Qy
TITLE OF INVENTION:	Expression of Starch Biosynthesis		Db
TITLE OF INVENTION:	Enzyme Genes		Qy
NUMBER OF SEQUENCES:	25		730
CORRESPONDENCE ADDRESS:			Db
ADDRESSEE:	E. I. du Pont de Nemours and Company		1453
STREET:	1007 Market Street		1453
CITY:	Wilmington		1453
STATE:	Delaware		1453
COUNTRY:	USA		1453
ZIP:	19898		1453
COMPUTER READABLE FORM:			Qy
MEDIA TYPE:	Floppy disk		790
COMPUTER:	IBM PC compatible		Db
OPERATING SYSTEM:	Microsoft Windows 95		1393
SOFTWARE:	Version 7.0A		Qy
CURRENT APPLICATION DATA:			850
APPLICATION NUMBER:	US/09/257, 894		Db
FILING DATE:			1333
PRIOR APPLICATION DATA:			Qy
APPLICATION NUMBER:	09/091, 052		910
FILING DATE:	JUNE 10, 1998		Db
ATTORNEY/AGENT INFORMATION:			1273
NAME:	Majarian, William R.		Qy
REGISTRATION NUMBER:	41,173		970
REFERENCE/DOCKET NUMBER:	BB-1066-A		Db
TELEPHONE:	302-392-4926		1213
TELEFAX:	302-73-0164		1030
SEQUENCE CHARACTERISTICS:			1050
LENGTH:	2165 base pairs		1050
TYPE:	nucleic acid		1050
STRANDEDNESS:	single		733
TOPOLOGY:	Linear		733
MOLECULE TYPE:	DNA (genomic)		1510
US - 09-257-894-8			674
Query Match	Score 1095.4;	DB 4;	1562
Best Local Similarity	42.3%;	Pred. No. 0;	1562
Matches 1342; Conservative	76.6%;	Mismatches 0;	1562
Matches 1342; Conservative	0;	Gaps 0;	1562
Matches 1342; Conservative	0;	Indels 411;	1562
Qy			1562
430	TTCCTCCACCCGGCAGGGCAAAGAAATAATGACATAGTCAAGCTTGCAGGCC	489	Db
1753	TCCCCCACCAAGGATGGCAAAAAATTCGAGATTGACGCCATGTCAGCTCAAGCTTA	1694	Qy
490	GTCAACACATGAAATTACGGTATTACAGTCAAGAAAGAAATTGCAAGT	549	Db
1693	AGTACCTCTGAGPATGGTACGCCCTPATAGAAGATCGTCAAGCTG	609	Qy
550	ATGAAAGTGAATGCTGATGGCTGATGGCTGATGGCTGATGGCTGATG	609	Db
553	TTCCCTTTCAGATGGTGGCTGATGGCTGATGGCTGATGGCTGATGGCTGATG	494	Qy





OTHER INFORMATION: SBEI -- Genbank Accession No. 6639126 217959									
NAME/KEY: CDS LOCATION: (2)...(2470) US-09-731-166-13									
<b>Query Match</b>									
Best Local Similarity	24.5%	Score	633.4;	DB 4;	Length	2470;			
Matches	1179;	Pred. No.	8.3e-196;						
Conservative	0;	Mismatches	736;	Indels	54;	Gaps	5		
Qy	456 ATATATCATAGATCCAAGCTTCAAGGTTTCGGTCAATACCGTATTCAACCTAGATTACGGATTCA 515	Db	251 ATATACACCTGGCCAAACTGGAGATTAATGGTACGGTACCGTAA 310						
Qy	516 CAGTACAAAAGACTCCGAGAAGAATTGACAAGTATGAAAGTTGAGGTAGTCGGTCAATTTCT 575	Db	311 AGATTCAGCCAGAAAGGTCAATTGAAGAAATGGGAAACT 370						
Qy	576 CGTGCTATGAAGTTGGTTCTACGCCATGAAAGGAAACTTATAGAACGTTGG 635	Db	371 AAAGGCATTGAAATTGGGATTAAATACAATGGGTGAACGTATCGTGTATGG 430						
Qy	636 GCACAGAGCTACGGCTGGCTGCAATTGATGGAGATTCAATAATGGAAATCCTATGGCA 695	Db	431 GCACCTGCTGGCGAGGGAGGTTATGGTCAATGCTGAAATGGTGAAC 490						
Qy	696 GATGTCATGACTCAGAATGGACTGTCGTCTGGGAGATCTTTCGCAATAATGGAGAT 755	Db	491 CATAAGATGGGAAAGGATAAATTTCGTTGGCTGATCAAAT 547						
Qy	756 GGTTACCCATTCCCGATCTGGTCAATGGTAAAGATACCTGATCTGGC 815	Db	548 GGAAACCTGGCATCCATCAAACTCAAGTTAAATTTCGCTTCTACAGTGGAGTA 607						
Qy	816 AACAAAGATTCTATCCGTGGATCAAGTTCTC-----AGTCAAGGACCAAGGTGAA 869	Db	608 TGGGTGATGCTTCAAGATTGGTCACTGTGGCACTTGAATTGGGA 667						
Qy	870 CTCCCATATATGGCATATACATATGATCCTCCGGAGGAGAAATGCTTCATAAAT 929	Db	668 GCTCCCTATGATGGTCTCATGGTCTCTGGATCCTCTGGTCAAGCTTAACTTCGCT 727						
Qy	930 CCTCGCCAANGAGCCAAATTCACTCGGATTTAGTGGCACTGGTGAATGAGTAGT 989	Db	728 CCTCGCCCTCAAGGCTGCTCACCGTATCTGAAGGCCATSTAGTATGGTGGT 787						
Qy	990 ACGGGCCGTAATTACACATATGCCAACCTTAAAGATGATGGTGTCCCTCGCATCAA 1041	Db	788 GAAAACCGAGTGTGAACTTGGAGAATTTGGAGACATGGTGGCATCGA 847						
Qy	1050 AAGCTTGGCTACAACTCTGTCAGCTCATGCTTCAAGGCAATTCATTATGGTGT 1100	Db	848 GCAAAATAACTCAACAGCTTCAGTGTGATGCCGATTCAGTCTCTCT 907						
Qy	1110 TTGGGTATCACTGTCAGGTTGGCAACTTCTCTGGTCAATATGGTGT 1166	Db	968 CTCAALATCTGTTATAAGGCCAACTTGTGGTCACTTGTGGTGTGTC 102						
Qy	1230 CATGGCTGATGTCATGATGGCTTCTCATGGATATTGTTCTGGTCAAT 1284	Db	1028 CATGGCTGATGCAAGTATAATGTCAGATGGTGGCAAAAGC 108						
Qy	1281 ACGGTGTGCACTCTTCACCTGGCAACAGTTGGTGGACTCTCGC 134	Db	1088 ACCCAAGAGTCTTCTATGGGAGATAGGGTTTATCAAACTTGGTGTGG 114						
Qy	1341 CTTTCAACTATGGAGCTGGGAGTTCTAGGTTCTCTTCAAACTGGTGTGG 140	Db	1148 CTGTCAACTATGGAGCTGGGAGTTCTAGGTTCTCTTCAAACTGGTGTGG 120						

RESULT 13	US-09-257-894-19/c
Sequence 19	Application US/09257894
Patient No.	6376749
Qy	1401 TTGGATGAGTACAAGTTGATGGTTAGATTGATGGGTGACTCTATGATGACCC 1460
Db	1208 TTGGATGAATTCACTGTTGATGGCTTCGATTTGATGGATTAATCATGCTGTATC 1267
Qy	1461 CATCATGGATTGCACTAACATGGAACTTACATGAAATACCTGGATGAACT 1520
Db	1268 CACCAAGTATAATGGGGTTACCTGGAAACTTACAGTGGACRA 1327
Qy	1521 GATGTAATGCGTGTGCTTATTGATGCTGTGAAATGATGATTGATGGTCATGGTCCTCTGCCA 1580
Db	1328 GCTGTCGATGCACTGGTTACATGATGTTACATGATGCTTGCAGAACATCTGGCCA 1387
Qy	1581 GAGGCGTGCACCATGGTAACATGGTAGTGGAATGCAACAGCTGATTCCGGTCAA 1640
Db	1388 GAAGCCTAACATGTTGTTGATGTTGAGATGTTGCGCATGGCTCCTTGGCCCAAGTGTAT 1447
Qy	1641 GATGGTGGTGGCTGGTTGATTCGTCACACATGGCTGTTGATAAATGGTTGAG 1700
Db	1448 GAAGGGGGGGTGGTTGACTATGGCTGGAAATGGTATCCTGATAGTGGATGGTACAC 1507
Qy	1701 ATTATTCAGAAGAGATGA -- AGATGGAAAATGGTGCACATTGTTACATATGTCGACC 1757
Db	1508 TACCTTGAGAATAAGTGAATCTGACTCTGACTGTTGCGATGCTGAAATAGCCATACTTGTACT 1567
Qy	1758 AACAGGGGGTGGTGGAAAAGTGTGTTCTATGCTGAAGACTGATGACAGGGCTCTGTT 1817
Db	1568 AACAGGAGATACTGAAAATGCACTGGCATATGCTGAGGCCATGTCAGTCTTATGTT 1627
Qy	1818 CGTGACAAAATCTGGATTTGGCTGATGGACAAGGGATATGTTGACTCATGGCTCTT 1877
Db	1628 GGCGACAAAATCTGGATTTCTCTGAGCAAGGGAAATGTCACCTGGCAATGTCAGAC 1687
Qy	1878 GACAGACCATCTACTCTCTCATAGATCGTGGAGTAGCTGACATTGGACAAAATGATCAGGGCTT 1937
Db	1688 TTGCAAGCTCTGCTCACCTACAACTGATCAGGGATTTGACTCCAAAAGTATGATTCACTC 1747
Qy	1938 ATTACATGGGATTAGCGGAAGGAGATTGAAATTATGGAAATGAAATTGGACAC 1997
Db	1748 ATCACAAATGGGCCCTGAGGTGATGGTACTGAAATTATGGAAATGAGTTGGTCAC 1807
Qy	1998 CCCGACSTGGATTGATTTCCAAAGGGTCACTCATTCCTCCAGTGGTAATTTGGTCTT 2057
Db	1808 CCAGAATGGATTGACTTCCAAAGAAA----- 1834
Qy	2058 GGGAAACAAATTACAGTTATGATAAATGCCGGCTAGGTTGATCTAGGCAATTCAAAGCAT 2117
Db	1835 GGGAAACAACTGGAGCTGATGATAAATGCAAGCAGCTGGAGCCCTTGTGCAACTGTATC 1894
Qy	2118 CTGAGGATATCGGAATGCAAGGTTGATCAAGCAATTCACTGATCTGAAGAGCCPAT 2177
Db	1895 TTGGCGTACAAGTACATGAAATGGTTGACCAAGGATGTAATCGCTCGATGAGGATT 1954
Qy	2178 GGTTCATGACTCTGAGCACCATACTATCACGGAGGATGAAAGGATCTGGATCATCATT 2237
Db	1955 TCCTTCCTTCTCGTCAAGGAGATCTCAGGACATGAACCATGAGAAAAGTTATT 2014
Qy	2238 GTCTTTCGAGGGAAACCTCGTTTCTGTTGACTTCAATTTCATGGACTAGCAGCTATTCG 2297
Db	2015 GTCTTTCGAACTGGGAGATTTAGTTCAATTTCATGGACTAGCAGCTATCCAAAGAAAACCTACGAG 2074
Qy	2298 GATTACCGAGTTGGCTGGTTAAGCAGGAAACTACAGATAGTCCTGGATTCAAGATGAT 2357
Db	2075 GGCTCAAAAGTGGGATGGGATGCTGGAAATACAGATGGCTGGACTCTGGATGCT 2134
Qy	2358 CCTTGTGTTGGAGGCTTGGCAGGCTTACATGATGCGAGGACTTCA 2406
Db	2135 CTGGTCTTCGGGAGAGTGGCCACAGTGGGATCACCTCA 2183

Db	1767	TCGGTTGATCGTATTCCAGCATGGATTGTTGATGCTGACTGTGATTCGACATGGATAATTGGTAAATTGGGA 1708	Db	687	TTGCAGGCCCTGCTCCACCTACATTGATCGAGGGATTTGCACCTCCAAAAGATGATTCACTC 628
Qy	870	CTCCCCATATAATGGCATATACTATGATCCTCCGGAGGGAAAGPATGCTTCAAAT 929	Qy	1938	ATTACCATGGATTAGGGGAGAAAGGATATTGGAAATTATGGAAATGATTGATGGACAC 1997
Db	1707	GCTCCCTATGATGGTCTGTTCACTGGATCTCTGTTCACTTAAAGGTACACATTAGCAT 1648	Db	627	ATCAAAATGGCCCTTGAGGTGATGCTGACTGTGATTC 568
Qy	930	CCTCAGGAAAGAGACCRAAATCACTTCGGATTATTGTCACGTTGGATGTTGATGT 989	Qy	1998	CCCGAGTGGATTGATTTCCAAGAAGGTGATCTACATCTCCAGTGGTAATTTCCTCC 2057
Db	1647	CTCTGGGCTTCAGGGCTCTCCAAAGGCTGCTCTCCAGTATGATGCTGATTCAGA 1588	Db	567	CCAGATGGATTGATTCAGGAA 541
Qy	990	A CGGAGGCAAGTAAATTACACATGGCAACTTGGCAATGGTGTCTTCGATCAA 1049	Qy	2058	GGGACAATTACAGTTATGATAATTGGCACTGGTAGCTTGCATTTGAGTCAATTGAGCAT 2117
Db	1587	GAAAGGCCAGCTAACACATAGGCAACATAGGAAATTGCGCACAACTGGCA 1528	Db	540	GGGACAACCTGGGCTATGATAATTGGCAAGCAGTGGRGCCTTGGAACATGATCAC 481
Qy	1050	AAGCTTCTGCTTACATGGCTTACATGGCTTACATGGCTTACATGGCTTACATGGCTT 1109	Qy	2118	CTGAGATAATCATGGATGGCAAGAGTTGATCAAGAAATTGAGTCTGAGTCAAGAGA 2177
Db	1527	GCAAAATACATGACACAGTGGCAATAGGAAATTGCGCACAACTGGCA 1468	Db	480	TGCGCTACAGTACAGTGTGATGTTGCAAGGGATGATGCCTGATGAGGATT 421
Qy	1110	TTTGGGTATCAAGTCACAACTTTGAGCTAGGCGCATTTGAGAATCTGTATGAT 1169	Qy	2178	GGTTTCATGACTCTTCAGCAACCAATACATACAGGAAAGGTGATGGATCATT 2237
Db	1467	TTGGGTGATGGTACAGTCACAACTTTGAGCTAGGCGCATTTGAGAATCTGTATGAC 1408	Db	420	TCCRTCTCTTCGTCCTCAAGGAGTGTGTCAGTCAGGAAAGTAAAGTTT 361
Qy	1170	TAAAGGTCTCTAAATGATAAAAGCTCAAGAGTTGGCTTCTGTCTCATGATATTGTT 1229	Qy	2238	GTCTTGAGAGGGAAACCTCTGTTTGTGATTCAATTTCATTGGACTAGGCTTATTG 2297
Db	1407	CTCAAATATCTGTGTGATGGTAAAGGACACAGTTGGGTTGGAGTCAGTGTGTC 1348	Db	360	GTCTTGAAACGGGGGATGTTGTTGTTCAATTCCATCCCAGAAAACCTPACGAG 301
Qy	1230	CATAGCCATGCTCATCAACTAACTGTTGCTGATGGCTGAAATGTTGATG 1280	Qy	2298	GATTACCGAGTTGGCTTAAACCCAGGAAAGTACAAGATACTGTTGAGTCAAGATG 2357
Db	1347	CATAGCCATGCAAGTAAATGTTGATGGTAAATGCTGATGGTCAAGTGTGGCA 1288	Qy	240	CTGGCTTCGGGACATGGAAAGCTTGGCACAGCTGGACATCACTTCA 192
Qy	1281	ACGGATGGTCACACTTCACTCTGACACAGGGGTCTCATTTGGATGTGGACTCTCGC 1340	Db	300	GGCTTCAAACTGGGATGGCTTGCAGGGTTTGCAGGCTTASTCATGATGCGAGGACTTCA 2406
Db	1287	ACCCAAGGTCTTATTTCATGGACACAGGGATGAGGGTTTACATGATAATTGG 1228	Db	240	CTGGCTTCGGGACATGGAAAGCTTGGCACAGCTGGACATCACTTCA 192
Qy	1341	CTTTTCACTATGGACCTGGGAGGGTCTACGGTTGCTTCAATGGCAAGGTTGG 1400	RESULT 14	US-09-257-894-24	
Db	1227	CTGTTCACTATGCTAACATGGGATTAAGGTTTACATGTTACATGCTTCACTCGAGATATTGG 1168		; Sequence 24, Application US/09257894	
Qy	1401	TTGGATGATGAACTGGTGTGATGGTTGCAATTGGGTTGACTCAATGTCACCC 1460		; Patent No. 6376719	
Db	1167	TTGGATGAACTGGTGTGATGGTTGCAATTGGGTTGACTCAATGTCAT 1108			
Qy	1461	CATCATGGATGTCAGGTGATTGATGTTGAAACTACAGGATAATTGAGTCACT 1520			
Db	1107	CACCATGGTATCAATGGGGTTTACTGGAAACTACAGGATAATTGAGTCACT 1048			
Qy	1521	GATGAGATGCTGTTGTTATTGATGCTGTTGAAATGATGTTGATGCTCPTCCCA 1580			
Db	1047	GCTGTGGATGCAAGTGTGTTTACATGATGCTTCAACCTTAAATGCACAAACTCTGGCA 988			
Qy	1581	GAGGGTCACCATGGTGAAGATGTTGAGGAACTGCCAACAGTTGCACTGGTGA 1640			
Db	987	GAAGCAACTGTGTGCAAGATGTTGAGGAACTGCCAACAGTTGCACTGGTGA 928			
Qy	1641	GATGGCTGGTGTGGCTTGTGATTGATGCTCCTCACATGGCTTGTGTCATAAAATGGGTGAG 1700			
Db	927	GAAGGGCTGGTGTGGCTTGTGACTATGCCCTGATGAGTGGATGTTGAC 868			
Qy	1701	ATTATGAAAGAGATGA -- -AGATGGAAAATGGGAGATGTCATGATGTGAC 1757			
Db	867	TACCTGAAGATAAAGATGACTCTGAGTGGTCACTGATGCTTGAATGGCAACTTGTGACT 808			
Qy	1758	AAAGGGCGGTGGTGGAAAGTGTGCTTGTGTCATACTGACAGGCCCTGTT 1817			
Db	807	AAAGGGAGATACTGAAATAATGCACTGGCATATGCTGAGTCATGCTT 748			
Qy	1818	GGTGACAAACTATTGCAATTGGCTGATGGACAAAGGATATGTCATGACTCT 1877			
Db	747	GGCGACAAACTATTGCAATTGGCTGATGGACAAAGGAAATGTCACCTGGCATGAGAC 688			
Qy	1878	GACAGACCATCATTCTCATAGATGTTGAGTGAATGGCAAAARGATCAGGCTT 1937			





Db	1508	TACCTGAAAGATAAAGATGACTCTGAGTGGTTCTATGCTGAAGTCATGCCATACTTGACT	1567
Qy	1758	AACAGGGGGTGGAAAGTGTGTTCTATGCTGAAGTCATGCCATACTTGACT	1817
Db	1568	AACAGGGAGATAACTGAAATAATGCAATCGCATATGCTGAAGCCATGATCAGTCATTGTT	1627
Qy	1818	CGTGACAAACATATTGCAATTGGCTGATGGACAAGGATATGATGACTCATGGCTCTT	1877
Db	1628	GCGACAAACATTGATTCCTCGATGGACAGAAATGACATGGCTGAGAC 1687	
Qy	1878	GACAGACCATCTACTCTCATAGATGCTGGAGTAGCATATTGACAAATGATGAGGCTT	1937
Db	1688	TTGCAGCCTGCTTACCTACATTGATGCACTGGATTGCACTCCAAAAGTGAATTGACTTC	1747
Qy	1938	ATTACCATGGATTAGCGGCAAGGATAATTGAAATTATGGAAATGATTGGACAC 1997	
Db	1748	ATCACATGGCCCTGAACTGATGCTACTGAAATTATGGAAAATGAGTTTGGTCAC	1807
Qy	1998	CCCGAGTGGATTGATTCCAAAGAGGTGATCTACATCTCCCAAGTGTAAATTGTTCT	2057
Db	1808	CCAGAATGGATGACTTCAGAGA-----	1834
Qy	2058	GGAAACAAATTACAGTTATGATAATGCCGGTAGGTTGATCTAGGCCATTCAAAAGCAT	2117
Db	1835	GGAAACAACTGAGGATGATAATGCCGACAGACTGGAGACTGATCAC 1894	
Qy	2118	CTGAGATATCATGGAATGCAAGATTGATGAGGATTCAGCACTTGGAAAGCCATT	2177
Db	1895	TTGCGGTAACTACATGAAATSGGTTGACCAAGCGATGATGGCTCGATGAGGATT	1954
Qy	2178	GTTTCATGACTCTGAGCACCAATACTACCGAAAGTGAAGGATGGATCATTT	2237
Db	1955	TCTCTCTTCTTGTCAAGCAGATGTCAGTGAAGGAAAGTTATT	2014
Qy	2238	GTCTTCGAGAGGGAAACCTCGTTTGTATTCAATTTCATTGGACTACGAGCTATTG	2297
Db	2015	GTCTTGAACGTGGATGTTGTTCAATTCCAAAGAAAACCTACGAG 2074	
Qy	2298	GATTACCGAGTGGCTTAAGCCAGGAAGTACAAGATAGTCATGGATTCAAGATGAT	2357
Db	2075	GGCTACAAAGTGGATCGATTGCTGGAAATACAGATAGCCCTGAACTCATGCT	2134
Qy	2358	CCTTTGGTTGGAGGCTTGGCAGGGCTAGTCATGATGAGGACTTC	2406
Db	2135	CTGGTCCTCGTGGACATGGAGAGTGGCAAGCTGGTGGTCACITCA	2183

Search completed: July 16, 2004, 19:54:58  
 Job time : 197 secs